



Passion.
Pride.
The Power of Blue.®

2009 Full-Line
Catalog



MillerWelds.com 1-800-4-A-Miller



Honoring the Blue in You.

You can tell True Blue welders at a glance. Passion for their profession shines through, and pride in craftsmanship drives them on to make the next weld better than the last. To make the second product superior to the first. And to embrace challenges large and small with the same get-it-done attitude.

Those infused with The Power of Blue® see possibilities in every piece of metal, and the potential inside themselves and others. Their ingenuity turns a simple length of tubing into a child's bike or the chassis for a championship race car. Their vision transforms average companies into world-class contenders. And their ability to mentor and motivate converts average students into star welders.

On the occasion of our 80th anniversary, Miller Electric Mfg. Co. pays homage to the countless individuals and companies that embody The Power of Blue. You inspire us all.

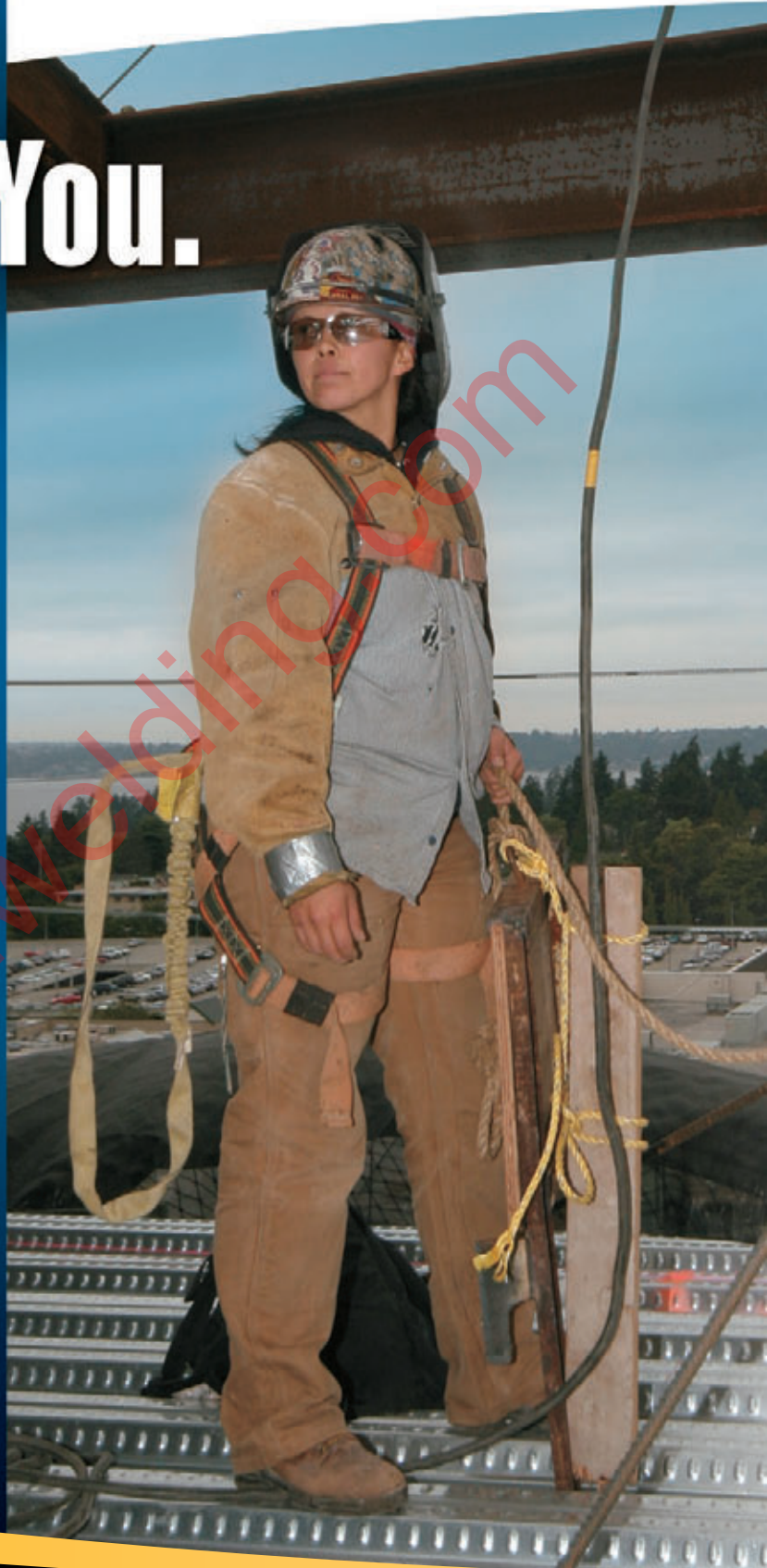


As seen on the cover, listed below are some of the individuals in the welding industry we at Miller would like to pay tribute to:

- 1) *Winter Douglas*, Manufacturing Engineer
Iron Grip Barbell Company
- 2) *Oswaldo Hernandez*, Fabricator/Welder
Bedrock Stone, Inc.
- 3) *Sarah Bingham*, SkillsUSA contestant
Uintah Basin Applied Technology College
- 4) *Frank Burns*, Burns Brothers Farms
- 5) *Brian Plamann*, Zero to 60 Garage
- 6) *Andy Meyers*, Crew Leader
Brookville Equipment Corp.
- 7) *Chico Nunez*, Welder
CMN Steel Fabricators



Pictured at right
April Finkbonner, Ironworkers Local 6



Contents 2009



3

What's
New



4

Help Me
Choose



6

Plasma
Cutters



11

Stick [SMAW]
Power
Sources



15

TIG [GTAW]
Power
Sources



23

MIG [GMAW]
Power
Sources



36

Automated
Manufacturing
Systems



38

Wire
Feeders



47

Multiprocess
Power
Sources

What's **NEW!** from Blue?

PG. 8



Spectrum® 625 X-TREME™
Plasma Cutter

PG. 9



Spectrum® 875
Plasma Cutter

PG. 16



Diversion™ 165
TIG Welder

PG. 26



Millermatic® 211 Auto-Set™ with MVP™
MIG Welder

PG. 27



Millermatic® 212 Auto-Set™
MIG Welder

PG. 52



PipeWorx™ Welding System
Pipe Welding Multiprocess

PG. 58



Wildcat® 200
Engine Drive

PG. 63



Trailblazer® 302 Air Pak™
Engine Drive


Enjoy the catalog! To see list prices or find your local distributor, go to our Web site MillerWelds.com or give us a call at **1-800-4-A-MILLER (1-800-426-4553)**





53
Multioperator Power Sources



56
Engine-Driven Welding Generators



69
Spot Welders


70
Submerged Arc


72
Welding Protection


74
Accessories


83
Miller Recommended Brands


94
Glossary


95
Literature Sheets/Index

If you're not familiar with welding basics, the following information can make choosing a machine easier. For interactive, highly informative assistance, go to MillerWelds.com.

1. Pick Your Welding or Cutting Process

Select the process that matches the metals you want to weld or cut.

Metal Type	Stick	MIG	FCAW	SAW	AC-TIG	DC-TIG	Resistance Spot	CAC-A AC	CAC-A DC	Plasma
Steel	●	●	●	●		●	●		●	●
Stainless Steel	●	●	●	●		●	●		●	●
Nickel Alloys	●	●				●	●			●
Aluminum		●			●				●	●
Cast Iron	●								●	●
Copper, Brass		●				●		●		●
Titanium						●				●
Magnesium Alloys					●					●
All Electrically Conductive										●
Skill Level	Moderate	Low	Low	Moderate	High	High	Low	Moderate	Moderate	Low

Key: ● Recommended

Welding Process: Stick, MIG, FCAW, SAW, AC-TIG, DC-TIG, Resistance Spot

Cutting Process: CAC-A AC, CAC-A DC, Plasma

2. Understand Process Advantages

Unfortunately, there is no single welding or cutting process suitable for all applications. For this reason, it is necessary to consider the advantages of one process over another.

Welding Process



Stick (SMAW)

- Better suited for windy, outdoor conditions
- More forgiving when welding on dirty or rusty metal



MIG (GMAW)

- Easiest process to learn
- High welding speeds possible
- Provides better control on thinner metals
- Cleaner welds possible with no slag to clean
- Same equipment can be used for Flux Cored welding

Pulsed MIG (GMAW-P)

- Flexibility and productivity — nearly all metals can be welded in all positions
- Larger diameter electrode wires
- Virtually no spatter
- Welds thin to thick metals



Flux Cored (FCAW)

- Works as well as Stick on dirty or rusty material
- Out-of-position welding
- Deep penetration for welding thick sections
- Increased metal deposition rate



Resistance Spot

- Portable, easy-to-operate welder for light industrial applications



Submerged Arc (SAW)

- High deposition rates can enhance weld speed and production
- Excellent mechanical properties for high-quality code and X-ray requirements
- Improves welding operator comfort and appeal — arc is below a bed of flux



TIG (GTAW)

- Provides highest quality and most precise welds
- Highly aesthetic weld beads
- Allows adjustment of heat input while welding by use of a remote control

Pulsed TIG (GTAW-P)

- More control on thin metals
- Less heat distortion on thin metals

Cutting Process



Air Carbon Arc Cutting and Gouging (CAC-A)

- Wide variety of metals
- Removes discontinuities or inferior welds



Plasma Arc Cutting and Gouging (PAC)

- Use with any electrically conductive metals
- Small and precise cut
- Small heat-affected zone which helps prevent warping or paint damage

3. Pick Your Power and Portability Needs

What should I know about duty cycle?

Duty cycle is the amount of time during a 10-minute period that the welder can continuously operate at its rated output without causing heat damage to the system. For example, a Millermatic 252 has 60% duty cycle at 200 amps of DC output. It can weld for six minutes out of 10 and then needs to cool for the remaining four minutes.

For applications requiring extensive arc-on time and/or welding at high amperages, choose a welder with a higher duty cycle, such as a Deltaweld 452 with 450 amps of DC output at 100% duty cycle. If a welder is operated below its rated output, the duty cycle typically increases.

How much welding or cutting output power do I need?

● **Light Industrial** products are suitable for the home hobbyist or occasional user. Designed to be easy to operate, affordably priced and typically have a 20% duty cycle and rated output of 230 amps or lower.

● **Industrial** products are suitable for applications that do not require high-volume production and typically have a 40–60% duty cycle and/or rated output of 300 amps or lower. Appropriate choice for professional welders.

● **Heavy Industrial** products typically have a duty cycle of 60–100% and a rated output of at least 300 amps, making them suited to high-volume production and/or welding of thicker materials. Designed with the arc characteristics and product features professional welders demand for code-quality work.

Note: Units listed in more than one classification share attributes of both.

Generator power


Out in the field, you may need an engine-driven welding generator to supply 120 or 240 VAC power to run tools, lights and to start motors. Miller's engine drives are packed with power and the larger units even offer option packages that add 10 to 20 kW of generator power.

What kind of input power do I have available?

To select the right product, you need to know the type of primary power available.

1 Phase Single-phase products require single-phase input power, typically found in homes and garages.

3 Phase Three-phase products require three-phase input power which is common in industrial settings, but shops can be specially wired to supply three-phase, industrial power.









 For locations where an electrical hook-up is not practical, consider a gas or diesel-powered, engine-driven welding generator to supply welding and generator power.

Is portability needed?

Can you bring the work to the machine, or does the machine need to go to the work? Check the Product Guide pages for types of portability:

- Shoulder strap, handles, running gear, carts, etc.
- Many engine-driven welding generators fit in the back of a pick-up truck, enabling them to drive to wherever the welding is needed. Heavy-duty trailers are also available for engine drives.

Power Icons

	Unit requires single-phase input power		Unit supplies alternating current and direct current weld output
	Unit requires three-phase input power		Unit supplies constant current weld output
	Unit supplies alternating current weld output		Unit supplies constant voltage weld output
	Unit supplies direct current weld output		Unit supplies constant current and constant voltage weld output

4. Check Out the Product Guides

The Product Guides (start of each major section) contain a complete list of Miller's power sources for that process section. Note: Visit MillerWelds.com for the most current information.

5. Go to Product Descriptions

Each color-coded section is identified by a primary process icon and title.

For more product specifications, give the product name and literature number to your distributor, visit us on the Web at MillerWelds.com or call 1-800-4-A-MILLER.

Note: Product specifications subject to change without notice.

DC TIG (TIGM1)
MillerWelds.com

Maxstar 150

STL — DC Stick/TIG LHM-Arc
STM — DC Stick/TIG HF Start

See Literature No. 80122.1
See Literature No. 80122.2

Welding Capabilities:    

Two models available —
STL: DC TIG/Stick with LHM-Arc starting without the use of high frequency.
STM: DC TIG/Stick with HF and LHM-Arc starting, plus built-in pulsing with a selection of four feed-pulse frequencies.

Auto-LHM circuitry automatically converts to 115–230 V, single-phase power without removing the covers to switch the power source.

Miller's exclusive multi-voltage plug (MVP)[®] allows connection to 115 or 230 V receptacles without tools — choose the plug that fits the receptacle and connect it to the power cord.
Portable in the shop or at the job site at 13.7 lb.

Low OCV Stick[™] reduces open-circuit voltage to 12–16 VDC when power source is not in use.

Single amperage range allows operator to accurately set amperage on both 115 or 230 V primary power.

Weld in gas somewhat eliminates the need for bulky torch with a gas valve.

Light Industrial  **EE CC-1**

Processes:

- TIG (GTAW)
- Pulsed TIG (GTAW-P) w/STM model
- Stick (SMAW)

Standard Plug Case With:

- Power source, cord and MVP plug
- 15 ft (4.5 m) work clamp with 20 mm C-clamp connector
- 13 ft (4 m) Stick electrode holder with 20 mm C-clamp connector
- Shoulder strap

Stick/TIG Plus include Above Plus:

- Interlock w/MT1130/230 TIG back with electrode
- Protective carrying case
- Soft-start regulator with gas flow

Most Popular Accessories:

- MVP[®] Plug
- Soft Start
- Power Case
- Gas Flow

See your Miller distributor for other Miller MillerWelds and accessories.

Model/Stock Number	Welding Process	Welding Amperage Range	Rated Output	Amperage range at 115V AC, 60 Hz, 1-Phase	Amperage range at 230V AC, 60 Hz, 1-Phase	Max. Open Circuit Voltage	Dimensions (H x W x D)	Net Weight (lb.)
Maxstar 150-01	TIG	115-190	150 A @ 14 VDC, 100% Duty Cycle	15.0	2.0	27	10 1/2 x 10 1/2 x 10 1/2	21.4
Maxstar 150-02	TIG	115-190	150 A @ 14 VDC, 20% Duty Cycle	20.0	3.0	27	10 1/2 x 10 1/2 x 10 1/2	21.4
Maxstar 150-03	Stick	20-190	150 A @ 14 VDC, 100% Duty Cycle	2.0	2.0	12	10 1/2 x 10 1/2 x 10 1/2	21.4
Maxstar 150-04	Stick	20-190	150 A @ 14 VDC, 20% Duty Cycle	3.0	3.0	12	10 1/2 x 10 1/2 x 10 1/2	21.4
Maxstar 150-05	Stick	20-190	150 A @ 14 VDC, 100% Duty Cycle	17.0	2.0	12	10 1/2 x 10 1/2 x 10 1/2	21.4
Maxstar 150-06	Stick	20-190	150 A @ 14 VDC, 20% Duty Cycle	20.0	3.0	12	10 1/2 x 10 1/2 x 10 1/2	21.4
Maxstar 150-07	Stick	20-190	150 A @ 24 VDC, 100% Duty Cycle	12.0	2.0	27	10 1/2 x 10 1/2 x 10 1/2	21.4

Listing of recommended processes. Colored bullets indicate power classification. Power icons indicate power supplied or required. See descriptions above.

Brief listing of most popular accessories. Refer to pages listed for more details.



Plasma Cutters

From the new Spectrum® 625 X-TREME™—packed with the most cutting power-per-pound—to the heavy-duty Spectrum 1251, Miller plasma cutters help you cut metal quickly and efficiently—and more reliably than the competition! To check out their capabilities, visit MillerWelds.com and go to the Plasma section.

MillerWelds.com/PlasmaCutters



	Product Guide	Page	Class	Gouging	Piercing	Rated Output/Duty Cycle	Rated Cutting Thicknesses*			Recommended Generator Power**	Special Features	Typical Applications
							Mild Steel	Stainless Steel	Aluminum			
1-Phase	Spectrum® 125C	7	●	●	●	12 A at 35%	1/8 in	1/8 in	1/16 in	2500 watts	Built-in air compressor	HVAC, hobbyist, auto body, plumbing
	Spectrum® 375	7	●	●	●	27 A at 35%	3/8 in	3/8 in	1/4 in	4000 watts	115/230 V input	Hobbyist, auto restoration, fabrication
	Spectrum® 375 X-TREME™	8	●	●	●	27 A at 35%	3/8 in	3/8 in	1/4 in	4000 watts	Auto-Line™: 115–230 V, MVP™ plugs, only 18 lb	HVAC, maintenance, construction
	Spectrum® 625 X-TREME™	8	●	●	●	40 A at 50%	5/8 in	1/2 in	3/8 in	8000 watts	Auto-Refire™, automatic air regulation, only 21 lb	Maintenance, light construction, body shops, prototyping
	Spectrum® 875	9	●	●	●	60 A at 50%	7/8 in	7/8 in	5/8 in	10,000 watts	Auto-Refire™, automatic air regulation, only 52 lb	Construction, maintenance/repair, fabrication
1 & 3-Ph	Spectrum® 2050	9	●	●	●	3-Phase: 55 A at 60% 1-Phase: 55 A at 50%	7/8 in	7/8 in	5/8 in	10,000 watts	Auto-Line™: 208–575 V 1- and 3-phase	Construction, maintenance/repair, fabrication
	Spectrum® 1000	10	●	●	●	3-Phase: 80 A at 60% 1-Phase: 80 A at 40%	1 in	1 in	7/8 in	15,000 watts	Auto-Line™: 208–575 V 1- and 3-phase	Heavy fabrication, manufacturing, automation
3-Ph	Spectrum® 1251	10	●	●	●	100 A at 80% (380–575 V) 100 A at 50% (230 V)	1-1/4 in	1-1/4 in	1 in	20,000 watts, 3-Phase	Auto-Line™: 208–575 V 3-phase only, industrial	Heavy fabrication, manufacturing, automation
Cutting w/Engine Drives	Engine-Driven Welders	Generator Power	Spectrum 375/375 X-TREME		Spectrum 625 X-TREME		Spectrum 875					
			Steel Cut	Output Amp Setting***	Steel Cut	Output Amp Setting***	Steel Cut	Output Amp Setting***				
	Wildcat® 200	6.5 kW	3/8 in	27 A	3/8 in	30 A	Not Recommended	Not Recommended				
	Bobcat™, Trailblazer®	11 kW	3/8 in	27 A	5/8 in	40 A	1/2 in	45 A				
	PipePro® 304, PRO 300	12 kW	3/8 in	27 A	5/8 in	40 A	5/8 in	50 A				
	Big 40® CC/CV	15 kW (optional)	3/8 in	27 A	5/8 in	40 A	7/8 in	60 A				
Big Blue® 500 CC/CV	20 kW (optional)	3/8 in	27 A	5/8 in	40 A	7/8 in	60 A					

A note on cut capacity ratings: the Spectrum Series rating system is designed to provide a guide to help our customers choose the right machine for their application. Rated cut capacity is based on traveling approximately 10 inches per minute to achieve a steady, precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements. Sever cut is the maximum cut achieved in ideal conditions. Some factors that dictate actual cut speeds, thickness capacity and duty cycles are: types of thermally conductive material being cut, available input power, output power settings and operator technique. For aluminum and other metals with high thermal conductivity, cutting capacities may be derated as much as 30%.

PRODUCT KEY


CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process
New! or Improved! products appear in blue type. *See cut capacity ratings note above. **Recommended generator power to achieve end-of-cut performance at rated cutting thickness.
 ***240 V, full KVA plug. Derate cut capacity with less generator power. For more detailed information, see individual specification sheets.



Spectrum® Series

Miller Industrial-Grade Technologies/Features common to most Spectrum products.

- Power Factor Correction (PFC)** (not available on 125C model). Uses less energy by utilizing input power more efficiently and increases productivity by reducing nuisance circuit breaker trips.
- Miller engine drive generator compatibility.**
- Industrial, heavy-duty work clamp.**
- LED indicators for easy troubleshooting.**
- Non-high-frequency arc starting** does not interfere with or damage controls or computers.
- Post-flow cooling circuitry** extends life of the consumable and torch by cooling them with postflow air after the trigger is released.
- Built-in gas/air filter/regulator** (either internal or external depending on unit and not available on Spectrum 125C). Provides air filtration of airborne particles 5 microns and larger. Additional filtration and water separation recommended.



These technologies provide reliability and performance others can't match... See why at MillerWelds.com/reliable

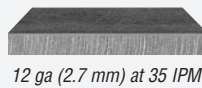
- LVC™ line voltage compensation** provides peak performance power under variable input voltage conditions for clean, steady cuts.
- Wind Tunnel Technology™** prevents abrasive dust and particles from damaging internal components.
- Fan-On-Demand™** cooling system only operates when needed, reducing the amount of airborne dust/dirt pulled through the unit.

Spectrum® 125C

See Literature No. PC/13.0



Mild Steel Cutting Capability
Not to scale.



Includes Industrial-Grade Technologies/Features (see above)

Built-in, heavy-duty industrial piston-driven compressor provides long life and superior airflow.

Solid-state, constant-current design offers **consistent 12 amp cutting arc** for continuous quality cutting up to 3/16 in steel.

Electronic Pilot Arc Controller automatically controls the pilot circuit to provide expanded metal cutting ability without having to re-trigger the torch, increasing productivity and extending tip life.

35% duty cycle is tested at 40° C (104° F) to give you the cutting power whenever you need it.

Stock Number (#907 149) 115 V, 60 Hz	Rated Output at 104°F (40°C) 12 A at 110 VDC, 35% Duty Cycle	Amps Input at Rated Output, 60 Hz			Dimensions H: 13½ in (343 mm) W: 8½ in (216 mm) D: 16 in (406 mm)	Net Weight with Torch 50 lb (22.7 kg)
		120 V	KVA	KW		
		20	2.4	2.0		

Light Industrial ● DC 1 Phase

Process • Air Plasma Cutting
125C Model Comes Complete With

- ICE-12C hand-held torch with 20 ft (6.1 m) cable
- Heavy-duty work clamp with 20 ft (6.1 m) cable
- 10 ft (3 m) power cord
- Extra consumables (2 electrodes, 2 tips)

375 Model Comes Complete With

- ICE-27C hand-held torch with 20 ft (6.1 m) cable
- Heavy-duty work clamp with 20 ft (6.1 m) cable
- 10 ft (3 m) power cord with 115 VAC, 20 A plug
- Extra consumables (3 electrodes, 3 tips and 1 air fitting)
- Built-in gas/air filter and regulator

Most Popular Accessories (pg 80)



- No. 30B Economy Cart with Cord Wrap #300 511
- In-Line Air Filter Kit #228 926 (375 model only)
- Circle Cutting Guide #195 981



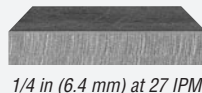
See your Miller distributor for other popular Miller options and accessories.

Spectrum® 375

See Literature No. PC/9.1



Mild Steel Cutting Capability
Not to scale.



Rated
3/8 in (9.5 mm) at 14 IPM
Maximum Sever cut of 5/8 in (15.9 mm) at 5 IPM

Includes Industrial-Grade Technologies/Features (see above)

Dual input voltage allows either 115 or 230 VAC input power and provides patented protection in case of incorrect switch position.

Electronic Pilot Arc Controller automatically controls the pilot circuit to provide expanded metal cutting capability without having to re-trigger the torch, increasing productivity and extending tip life.

Pressure gauge and pressure knob for manual adjustment of pressure to the torch.

*Recommended 30 A branch circuit for maximum performance.

Stock Number (#903 891) 115/230 V, 60 Hz	Rated Output at 104°F (40°C) 15–27 A at 90 VDC, 35% Duty Cycle	Amps Input at Rated Output, 60 Hz, 1-Phase				Compressor Requirement 4.5 CFM (128 L/min) at 90 PSI (621 kPa)	Dimensions H: 13½ in (343 mm) W: 8½ in (216 mm) D: 16 in (406 mm)	Net Weight with Torch 55 lb (25 kg)
		115 V	230 V	KVA	KW			
		28*	14	3.3	3.2			

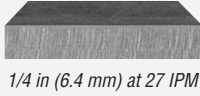
Spectrum® 375 X-TREME™

See Literature No. PC/9.2



Mild Steel Cutting Capability

Not to scale.



Rated

Maximum Sever cut of 5/8 in (15.9 mm) at 5 IPM—cutting at 27 amps (115 V, 20 A service with 5-20P MVP or 230 V 6-50P MVP).



Spectrum 375 X-TREME with X-CASE (#907 339) shown.

Includes Industrial-Grade Technologies/Features (see pg 7)

Auto-Line™ circuitry automatically connects to 115–230 VAC, single-phase power, 50/60 Hz, without removing the covers to relink the power source.

Miller's exclusive **multi-voltage plug (MVP™)** allows connection to 115 or 230 V receptacles without tools—choose the plug that fits the receptacle and connect it to the power cord.

Automatic air regulation automatically compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

X-CASE™ provides the ultimate protection during transport and storage. Additional space is ideal for MVP plugs, consumables box, gloves, etc.

Shoulder strap allows the end user to easily move from location to location.

Stock Number	Input Power	Rated Output at 104°F (40°C)	Amps Input at Rated Output, 50/60 Hz, 1-Phase	KVA	KW	Compressor Requirement	Dimensions	Net Weight with Torch
#907 339 115–230 V, 50/60 Hz w/X-CASE™	120 V (15 A)	20 A at 88 VDC, 35% Duty Cycle	20.6	2.5	2.3	4.5 CFM (128 L/min)	H: 9 in (229 mm) W: 5½ in (140 mm) D: 13¼ in (337 mm)	18 lb (8.2 kg)
	120 V (20 A)	27 A at 92 VDC, 20% Duty Cycle	28.8	3.4	3.2	at 90 PSI (621 kPa)		
#907 303 115–230 V, 50/60 Hz	240 V	27 A at 92 VDC, 35% Duty Cycle	13.9	3.4	3.2			

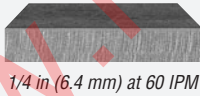
Spectrum® 625 X-TREME™

See Literature No. PC/9.6



Mild Steel Cutting Capability

Not to scale.



Rated

Maximum Sever cut of 7/8 in (22.2 mm) at 5 IPM

NEW!
Available 1st Quarter



All Spectrum 625 X-TREME models **include** X-CASE!

Includes Industrial-Grade Technologies/Features (see pg 7)

Auto-Retire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

Automatic consumable detection detects consumable type installed and adjusts gas pressure to optimize cutting performance, eliminating the need for a manual regulator.

Automatic air regulation automatically compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

X-CASE™ provides the ultimate protection during transport and storage. Additional space is ideal for MVP plugs, consumables box, gloves, etc.

Shoulder strap allows the end user to easily move from location to location.

Stock Number	Rated Output at 104°F (40°C)	Amps Input at Rated Output, 50/60 Hz		Compressor Requirement	Dimensions	Net Weight with Torch
		208 V	230 V			
#907 404 208/230 VAC with 12 ft (3.7 m) Torch	40 A at 140 VDC, 50% Duty Cycle	33	30	6.8	6.6	12 ft Torch: 21 lb (10 kg) 20 ft Torch: 23 lb (11 kg)
		#907 404-01-1 208/230 VAC with 20 ft (6.1 m) Torch				

Light Industrial ● DC 1 Phase

Processes

- Air Plasma Cutting
- Air Plasma Gouging with 625 model

375 Model #907 339

Comes Complete With

- X-CASE™ for protection and storage
- ICE-27T hand-held torch with 12 ft (3.7 m) cable
- Heavy-duty work clamp with 12 ft (3.7 m) cable
- 10 ft (3 m) MVP™ power cord with MVP™ plugs 5-15P (115 VAC, 15 A) and 6-50P (230 V, 50 A)
- Consumables box with 3 electrodes and 3 tips
- Built-in gas/air filter and regulator

375 Model #907 303

Comes Complete With

- All of the above except X-CASE™
- ### 625 Model Comes Complete With
- X-CASE™ for protection and storage
 - ICE-40T hand-held torch with 12 ft (3.7 m) or 20 ft (6.1 m) cable
 - Heavy-duty work clamp with 12 ft (3.7 m) or 20 ft (6.1 m) cable
 - 12 ft (3.7 m) power cord
 - Consumables box with 3 electrodes, 3 tips and deflector
 - Built-in gas/air filter and regulator

Most Popular Accessories (pg 80)



- Circle Cutting Guide #195 981



- In-Line Air Filter Kit #228 926

- X-CASE™ #300 184
- MVP™ Plugs (375 model only)



- Standoff Roller Guide #194 883



- Plasma Torch Consumable Kits For ICE-27T #222 939 For ICE-40T #222 940



- MIG Gloves (pg 73)

See your Miller distributor for other popular Miller options and accessories.



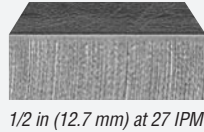
Spectrum® 875

See Literature No. PC/9.8



NEW!
Available
1st Quarter

**Mild Steel
Cutting Capability**
Not to scale.



Rated
Maximum Sever cut of
1-1/4 in (32 mm) at 3 IPM

**SIZE
DOES
MATTER**

Includes Industrial-Grade Technologies/Features (see pg 7)

Auto Postflow calculates the length of postflow time based on the amount of cutting time to optimize consumable life and eliminate excessive air usage.

Auto-Retire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

Automatic air regulation automatically compensates for input pressure variation to provide constant recommended torch pressure for optimum cutting performance.

Patented Ultra-Quick Connect™ torch and work cable offers the fastest plasma torch and work cable connection and removal in the industry.



Industrial DC 1-Phase 3-Phase
Spectrum 875 is 1-phase only.

Process

- Air Plasma Cutting and Gouging

875 Comes Complete With

- ICE-60T hand-held torch with 20 ft (6 m) or 50 ft (15.2 m) cable
- Heavy-duty work clamp with 20 ft (6 m) or 50 ft (15.2 m) cable
- 10 ft (3 m) power cord
- Built-in gas/air filter and regulator
- Extra consumables

2050 Comes Complete With

- ICE-55C hand-held torch with 25 ft (7.6 m) or 50 ft (15.2 m) cable; or ICE-55CM machine-held torch with 50 ft (15.2 m) cable and remote pendant
- Heavy-duty work clamp with 25 ft (7.6 m) or 50 ft (15.2 m) cable
- 10 ft (3 m) power cord
- Built-in gas/air filter and regulator
- Extra consumables

Most Popular Accessories (pg 80)

- **Protective Cover for Spectrum 875 #300 388**
- **Protective Cover for Spectrum 2050 #195 271 (not shown)**



- **No. 30B Economy Cart with Cord Wrap #300 511**



- **Circle Cutting Guide #195 981**



- **RTI Filter and Bracket #300 491**



- **Adapter Cord #300 158**



- **20 ft Cable Cover #239 642**
- **25 ft Cable Cover #231 867**
- **50 ft Cable Cover #231 868**



- **MIG Gloves (pg 73)**



See your Miller distributor for other popular Miller options and accessories.

Stock Number	Rated Output at 104°F (40°C)	Amps Input at Rated Output, 50/60 Hz				Compressor Requirement	Dimensions	Net Weight with Torch
		208 V	230 V	KVA	KW			
(#907 390-01-1) 208/230 VAC with 20 ft (6.1 m) Torch (#907 390-01-2) 208/230 VAC with 50 ft (15.2 m) Torch	60 A at 140 VDC, 50% Duty Cycle (230 V) 40% Duty Cycle (208 V)	47	42	9.9	9.8	6.75 CFM (191 L/min) at 90 PSI (621 kPa)	H: 13½ in (343 mm) W: 8¾ in (222 mm) D: 18½ in (470 mm)	20 ft Torch: 52 lb (24 kg) 50 ft Torch: 61 lb (28 kg)

Spectrum® 2050

See Literature No. PC/7.0



**Mild Steel
Cutting Capability**
Not to scale.



Rated
Maximum Sever cut of
1-1/8 in (28.6 mm) at 3 IPM

Includes Industrial-Grade Technologies/Features (see pg 7)

Auto-Line™ automatically connects unit to any primary voltage from 208 to 575 volts, single- or three-phase, 50 or 60 Hz without removing the covers to relink the power source.

Available machine torch option for automatic pipe beveling, track systems and CNC cutting tables.

Pressure gauge and pressure knob for manual adjustment of pressure to the torch.

*Add 4 lb (1.8 kg) for machine held torch.

Stock Number	Rated Output at 104°F (40°C)	Amps Input at Rated Output, 50/60 Hz								Compressor Requirement	Dimensions	Net Weight with Torch*	
		208 V	230 V	380 V	400 V	415 V	460 V	575 V	KVA				KW
(#903 777-01-2) 25 ft (7.6 m) Torch (#903 777-01-3) 50 ft (15.2 m) Torch (#903 777-02-2) 50 ft (15.2 m) Machine Torch with Remote Pendant Control (#180 605)	25-55 A at 110 VDC, 60% Duty Cycle, 3-Phase 25-55 A at 110 VDC, 50% Duty Cycle, 1-Phase	21	20	10	10	10	9	8	7.6 (7.9@575V)	7.4	6.0 CFM (170 L/min) at 100 PSI (689 kPa)	H: 17 in (432 mm) W: 12½ in (318 mm) D: 20½ in (521 mm)	25 ft Torch: 86 lb (39 kg) 50 ft Torch: 97 lb (44 kg)



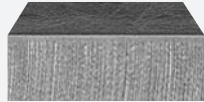
Spectrum® 1000

See Literature No. PC/8.0



Mild Steel Cutting Capability

Not to scale.



1/2 in (12.7 mm) at 40 IPM



Rated

1 in (25.4 mm) at 10 IPM

Maximum Sever cut of 1-1/2 in (38.1 mm) at 4 IPM

Includes Industrial-Grade Technologies/Features (see pg 7)

Auto-Refire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

CNC/robotic machine interface is standard on all units, providing OK to move, remote start and voltage sensing capabilities with easy connection on the back of the unit.

Pressure gauge and pressure knob for manual adjustment of pressure to the torch.

Patented Ultra-Quick Connect™ torch and work cable offers the fastest plasma torch and work cable connection and removal in the industry.



*Add 4 lb (1.8 kg) for machine held torch.

Stock Number	Input Power	Rated Output at 104°F (40°C)	Amps Input at Rated Output, 50/60 Hz						Compressor Requirement	Dimensions	Net Weight with Torch*	
			208 V	230 V	400 V	460 V	575 V	KVA				KW
#907 162-01-1 25 ft (7.6 m) Torch #907 162-01-2 50 ft (15.2 m) Torch #907 162-01-3 25 ft (7.6 m) Machine Torch #907 162-01-5 50 ft (15.2 m) Machine Torch	3-Phase	80 A at 150 VDC Duty Cycle: 230–575 V: 60% 208 V: 50%	41	36	21	18	14	14.6	13.7	7.8 CFM (220 L/min) at 100 PSI (689 kPa)	H: 17 in (432 mm) W: 12 1/2 in (318 mm) D: 20 1/2 in (521 mm)	25 ft Torch: 92 lb (42 kg) 50 ft Torch: 105 lb (48 kg)
	1-Phase	80 A at 150 VDC Duty Cycle: 230 V: 50% 208 V: 40%	69	62	—	—	—	14.3	14.4			

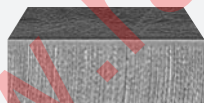
Spectrum® 1251

See Literature No. PC/11.0



Mild Steel Cutting Capability

Not to scale.



1/2 in (12.7 mm) at 60 IPM



Rated

1-1/4 in (31.8 mm) at 10 IPM

Maximum Sever cut of 1-3/4 in (44.5 mm) at 3 IPM

Includes Industrial-Grade Technologies/Features (see pg 7)

Auto-Refire™ provides ultimate convenience by automatically controlling the pilot arc when cutting expanded metal or multiple pieces of metal.

CNC/robotic machine interface is standard on all units, providing OK to move, remote start and voltage sensing capabilities with easy connection on the back of the unit.

Pressure gauge and pressure knob for manual adjustment of pressure to the torch.

Patented Ultra-Quick Connect™ torch and work cable offers the fastest plasma torch and work cable connection and removal in the industry.



*Add 4 lb (1.8 kg) for machine held torch.

Stock Number	Input Power	Rated Output at 104°F (40°C)	Amps Input at Rated Output, 50/60 Hz						Compressor Requirement	Dimensions	Net Weight with Torch*	
			208 V	230 V	400 V	460 V	575 V	KVA				KW
#907 305-01-1 25 ft (7.6 m) Torch #907 305-01-2 50 ft (15.2 m) Torch #907 305-01-3 25 ft (7.6 m) Machine Torch #907 305-01-4 50 ft (15.2 m) Machine Torch	3-Phase	100 A at 160 VDC Duty Cycle: 380–575 V: 80% 230 V: 50% 208 V: 40%	56	48	28	24	19	19.1	18.1	9.2 CFM (260 L/min) at 100 PSI (698 kPa)	H: 17 in (432 mm) W: 12 1/2 in (318 mm) D: 20 1/2 in (521 mm)	25 ft Torch: 97 lb (44 kg) 50 ft Torch: 110 lb (50 kg)

Heavy Industrial

DC 3 1 Phase Phase Spectrum 1251 is 3-phase only.

Process

- Air Plasma Cutting and Gouging

1000 Comes Complete With

- ICE-80T hand-held torch with 25 ft (7.6 m) or 50 ft (15.2 m) cable; or ICE-80TM machine-held torch with 25 ft (7.6 m) or 50 ft (15.2 m) cable and remote interface cables
- Heavy-duty work clamp with 25 ft (7.6 m) or 50 ft (15.2 m) cable
- 12 ft (3.7 m) power cord
- Extra consumables

1251 Comes Complete With

- ICE-100T hand-held torch with 25 ft (7.6 m) or 50 ft (15.2 m) cable; or ICE-100TM machine-held torch with 25 ft (7.6 m) or 50 ft (15.2 m) cable and remote interface cables
- Heavy-duty work clamp with 25 ft (7.6 m) or 50 ft (15.2 m) cable
- 12 ft (3.7 m) power cord
- Extra consumables

Most Popular Accessories (pg 80)

- Protective Cover #195 424



- No. 30B Economy Cart with Cord Wrap #300 511



- Circle Cutting Guide #195 981



- RTI Filter and Bracket #300 491



- 25 ft Cable Cover #231 867
- 50 ft Cable Cover #231 868



- MIG Gloves (pg 73)



See your Miller distributor for other popular Miller options and accessories.



Stick [SMAW]

To Improve Your Skills, visit the **Stick Welding Resources** section on MillerWelds.com. You'll get tips that make welding easier, an interactive **Stick Weld Parameter Calculator** and lots of other free resources.

MillerWelds.com/Stick



Product Guide

	Page	Class	Stick	TIG	DC TIG	DC TIG-P	Flux Core*	CAC-A	Portability	Weldable Metals	Welding Amperage Range	Special Features	Typical Applications	
Thunderbolt® XL 225 AC	12	●	●						Optional running gear	Steel, stainless	30–235 AC	Infinite control	Education, maintenance/repair, farm	1-Phase
Thunderbolt® XL 225/150 AC/DC	12	●	●							30–235 AC 30–160 DC	Infinite control	Education, maintenance/repair, farm		
Thunderbolt® XL 300/200 AC/DC	12	●	●							40–300 AC 30–200 DC	Infinite control	Maintenance/repair, farm		
Dialarc® 250 AC/DC	12	●	●	●			●	3/16"	Lift eye, optional running gear	35–300 AC 35–265 DC	One control knob with high/low range	Education, maintenance/repair, fabrication		
Maxstar® 150 S	13	●	●						Shoulder strap, optional case	20–150 DC	115–230 V Auto-Line™, MVP™ plugs	MRO, ship installation/repair, farm/ranch		
Maxstar® 200 STR	13	●	●	●					Shoulder strap, handle, optional cart	1–200 DC	115–460 V Auto-Line™, Stick/TIG machine	Construction, fabrication, pipe, steel erection, shipbuilding	1 & 3-Phase	
CST™ 280	14	●	●	●					Handle, optional cart	5–280 DC	High output, portable at 41 lb, also available in multi-unit rack	Construction, fabrication, pipe, steel erection, shipbuilding		
XMT® Series	50	●							See the Multiprocess section on page 47.					
SRH-444	12	●	●	●			●	5/16"	Lift eye, optional running gear	Most metals	30–280 DC 50–500 DC	Built-in Hot Start™	Steel erection, pipe, fab, shipbuilding, foundries	3-Phase
Gold Star® 302	12	●	●	●			●	1/4"			15–395 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries	
Gold Star® 452	12	●	●	●			●	5/16"			20–590 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries	
Gold Star® 652	12	●	●	●			●	3/8"			50–850 DC	Built-in arc control	Steel erection, pipe, fab, shipbuilding, foundries	
Dimension™ Series	48	●							See the Multiprocess section on page 47.					

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process
 *Constant-current (Stick) machines can utilize voltage-sensing wire feeders for some flux-core applications.
 For more detailed information, see individual specification sheets.

Also see the TIG section (page 15) for machines that Stick weld.

Thunderbolt[®] XL 225 AC, 225/150 AC/DC and 300/200 AC/DC

See Literature No. AC/2.0 for AC model and AD/8.0 for AC/DC models



Thunderbolt 300/200 AC/DC shown.

Economical Stick machines with precise, dependable control.

- Accu-Set™ amperage indicator.
- Unit allows higher duty cycle when amperage decreases.
- Infinite current control.
- Output selector switch on AC/DC units.
- 225 and 225/150 models certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Light Industrial ● CC AC/DC 1 Phase 225 AC model is AC only.

Process • Stick (SMAW)

Comes Complete With

- 15 ft (4.5 m) No. 4 electrode cable with heavy-duty electrode holder
- 10 ft (3 m) work cable with clamp
- Power cord on all models with plug included on 225 and 225/150 models

See distributor for Miller accessories.

Model	Stock Number	Welding Amperage Range	Rated Output at 20% Duty Cycle, 60 Hz (15% Duty Cycle, 50 Hz)	Rated Output at 100% Duty Cycle	Amps Input at Rated Output 220 V	230 V	Max. Open-Circuit Voltage	Dimensions	Net Weight
Thunderbolt XL 225 AC (CSA)	(#903 641) 230 V, 50/60 Hz	AC: 30–235	AC: 225 A at 25 VAC	AC: 100 A	—	47.5	80	H: 18¾ in (476 mm) W: 12¾ in (323 mm) D: 17½ in (445 mm)	85 lb (39 kg)
Thunderbolt XL 225/150 AC/DC (CSA)	(#903 642) 230 V, 50/60 Hz	AC: 30–235 DC: 30–160	AC: 225 A at 25 V DC: 150 A at 25 V	AC: 100 A DC: 65 A	—	47.5	80		104 lb (47 kg)
Thunderbolt XL 300/200 AC/DC (Non-CSA)	(#903 686) 220 V, 50/60 Hz	AC: 40–300 DC: 30–200	AC: 300 A at 30 V DC: 200 A at 25 V	AC: 130 A DC: 90 A	70	—	80		134 lb (61 kg)

Dialarc[®] 250 AC/DC

See Literature No. AD/2.1



Superb performance and versatility in a flexible Stick machine.

- Single-dial infinite current control.
- High and low ranges.
- Forced-draft cooling fan.
- Superior 6010 and 7018 Stick welding.
- High output and duty cycle.
- Optional remote weld output control.

Light Industrial ● Industrial ● CC AC/DC 1 Phase

Processes

- Stick (SMAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (3/16 in carbons)

See distributor for Miller accessories.

Stock Number	Welding Amperage Ranges	Rated Output	Amps Input at Rated Output, 60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight		
			200 V	208 V	230 V	460 V	575 V	KVA	KW				
Without Power Factor Correction (#907 017) 200(208)/230/460 V (#907 016) 230/460/575 V	AC	35–300	225 A at 29 VAC, 30% Duty Cycle	84	—	73	36	29	16.8	9.8	70	H: 24¼ in (616 mm) W: 19 in (483 mm) D: 28 in (711 mm)	360 lb (163 kg)
	DC	35–265	225 A at 29 VAC, 30% Duty Cycle	92	—	80	40	32	18.6	11.8	79		
With Power Factor Correction (#907 015) 208/230/460/575 V	AC	35–300	225 A at 29 VAC, 30% Duty Cycle	—	60	55	27	22	12.5	9.9	70		365 lb (166 kg)
	DC	35–265	225 A at 29 VAC, 30% Duty Cycle	—	66	60	30	24	13.7	10.8	79		

SRH-444

See Literature No. DC/7.0



Proven durability and the ability to handle a wide range of applications.

- Electrical amperage control.
- Remote control capability.
- High and low output studs.
- Control circuit overload protection.

Heavy Industrial ● CC DC 3 Phase

Processes

- Stick (SMAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (5/16 in carbons)

See distributor for Miller accessories.

Stock Number	Welding Amperage Ranges	Rated Output at 60% Duty Cycle	Amps Input at Rated Output, 60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight
			200 V	230 V	460 V	575 V	KVA	KW			
(#900 751) 208/230/460 V (#900 753) 230/460/575 V	30–280 50–500	400 A at 36 V	89	80	40	32	31.9	19.6	75	H: 30¼ in (768 mm) W: 22½ in (572 mm) D: 35¾ in (908 mm)	784 lb (356 kg)

Gold Star[®] Series

See Literature No. DC/8.1



Gold Star 452 shown.

Rugged, reliable performance and superior arc characteristics.

- Hot Start™ and built-in arc control.
- Enclosed circuit board.
- Thermal overload protection with light.
- Fan-On-Demand™.
- 15 A, 115 VAC duplex receptacle.
- Power efficient.
- Remote control capability.
- Optional digital volt and amp meters.

Heavy Industrial ● CC DC 3 Phase

Processes

- Stick (SMAW) • TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons—302: 1/4 in, 452: 5/16 in, 652: 3/8 in)
- Flux Cored (FCAW)
- MIG Spray Transfer (GMAW) with voltage-sensing feeder

See distributor for Miller accessories.

Model	Stock Number	Amperage Range in CC Mode	Rated Output	Amps Input at Rated Output, 60 Hz						Max. Open-Circuit Voltage	Dimensions (Includes lift eye and strain relief.)	Net Weight
				200 V	230 V	460 V	575 V	KVA	KW			
Gold Star 302	(#903 373) 200(208)/230/460 V (#903 398) 230/460/575 V	15–395	300 A at 32 VDC, 60% Duty Cycle	70	61	31	25	24.5	13.8	72 VDC	H: 30 in (762 mm) W: 23 in (585 mm) 302 D: 30½ in (775 mm) 450 D: 38 in (966 mm) 675 D: 38 in (966 mm)	352 lb (160 kg)
Gold Star 452	(#903 374) 200(208)/230/460 V (#903 400) 230/460/575 V	20–590	450 A at 38 VDC, 60% Duty Cycle	102	89	45	36	35.5	23.3	72 VDC		404 lb (183 kg)
Gold Star 652	(#903 402) 230/460/575 V	50–850	650 A at 44 VDC, 60% Duty Cycle	—	124	62	50	49.4	36	72 VDC		505 lb (229 kg)

Maxstar® 150 S

See Literature No. DC/27.0

Best in class—provides maximum portability and performance in the most compact Stick package in the industry. Packs dependability and performance all in one machine.



Maxstar 150 S with Case (#907 134-01-2) shown.

Miller's exclusive **multi-voltage plug (MVP™)** allows connection to 115 or 230 V receptacles without tools — choose the plug that fits the receptacle and connect it to the power cord.

Portable in the shop or at the job site — at 13.2 lb the shoulder strap allows the operator to easily move from location to location.

Auto-Line™ circuitry automatically connects to 115–230 VAC, single-phase power without removing the covers to relink the power source.

Low OCV Stick reduces open-circuit voltage to 12–16 VDC when power source is not in use.

Adaptive Hot Start™ for Stick arc starts prevents electrode from sticking.

Single amperage range allows operator to accurately set amperage on both 115 or 230 V primary power.

Light Industrial ● **CC DC 1** Phase

Process • Stick (SMAW)

#907 134 Comes Complete With

- Power source with cord
- 13 ft (4 m) Stick electrode holder with 25 mm Dinse connector
- 10 ft (3 m) work clamp with 25 mm Dinse connector
- MVP™ plugs
- Shoulder strap

#907 134-01-2 Includes Above Plus

- Protective X-CASE™

Most Popular Accessories

- MVP™ Plugs (pg 80)
- Protective X-CASE™ #300 184 (pg 80)

See your Miller distributor for other popular Miller options and accessories.

*See page 20 in the TIG section for Maxstar 150 STL and STH.
**Sense voltage for Stick and Lift-Arc™ TIG.

Stock Number*	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
#907 134 115–230 VAC, 50/60 Hz	115 VAC	20–100	70 A at 22.8 VDC, 100% Duty Cycle	17.4	2.0	1.9	90 (12–16 VDC**)	H: 9 in (229 mm) W: 5½ in (140 mm) D: 13¼ in (337 mm)	13.2 lb (6.0 kg)
			100 A at 24 VDC, 35% Duty Cycle	26.4	3.0	3.0			
#907 134-01-2 115–230 VAC, 50/60 Hz w/Case	230 VAC	20–150	100 A at 24 VDC, 100% Duty Cycle	13.1	3.0	2.8	90 (12–16 VDC**)		
			150 A at 26 VDC, 30% Duty Cycle	21.6	4.9	4.7			

Maxstar® 200 STR

See Literature No. DC/29.5

Unit provides maximum flexibility by automatically connecting to any input power while maintaining the best DC Stick/TIG welding performance in its product class.



Allows for any input voltage hook-up from 120–460 V, single- or three-phase with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Low OCV Stick reduces open-circuit voltage to 9–14 VDC when power source is not in use. This built-in circuit design eliminates the need for add-on voltage reducers.

Excellent for thin and medium wall pipe welding.

Lift-Arc™ start for TIG arc starts without the use of high frequency.

Remote amperage control provided through 14-pin receptacle on front of the machine.

Adaptive Hot Start™ for Stick arc starts automatically increases output amperage at start of weld should the start require it. Prevents electrode from sticking and creating an inclusion.

Portable at 32 lb — easily moved from location to location.

Industrial ● **CC DC 3 1** Phase Phase

Processes

- Stick (SMAW)
- TIG (GTAW)

Comes Complete With

- Power source with cord
- (2) 50 mm Dinse connectors

Most Popular Accessories

- Air-Cooled TIG Torch Adapter #195 378 (pg 78)
- Protective Cover #195 321 (pg 81)
- RCCS-14 Remote Control #043 688 (pg 82)
- RFCS-14 HD Remote Control #194 744 (pg 82)
- Weldcraft® WP17V12RM TIG Torch

See your Miller distributor for other popular Miller options and accessories.

*See page 21 in the TIG section for Maxstar 200 Series.
**Sense voltage for Stick and Lift-Arc™ TIG.

Stock Number*	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
#907 036	Stick	Three-Phase	1–200	150 A at 26 V, 60% Duty Cycle	— 14.7 13.1 7.4 6.6 6.4 5.2 5.0	70 VDC (9–14 VDC**)		H: 13½ in (343 mm) W: 7½ in (191 mm) D: 17½ in (445 mm)	32 lb (14.5 kg)	
				150 A at 26 V, 60% Duty Cycle	— 24.9 21.7 — — — 5.0 5.0					
				125 A at 25 V, 50% Duty Cycle	34.1 — — — — — 4.0 3.8					
				90 A at 24 V, 100% Duty Cycle	25.0 — — — — — 4.0 3.8					
	TIG	Three-Phase	1–200	175 A at 17 V, 60% Duty Cycle	— 12.1 10.5 6.0 5.3 5.2 4.2 4.0	70 VDC (9–14 VDC**)				
				175 A at 17 V, 60% Duty Cycle	— 19.9 17.4 — — — 4.0 4.0					
				150 A at 16 V, 70% Duty Cycle	29.7 17.1 14.1 — — — 3.4 3.4					
				110 A at 15 V, 100% Duty Cycle	20.0 — — — — — 2.0 2.0					

CST™ 280

See Literature No. DC/29.55

Durable yet lightweight Stick/TIG welding power source designed for construction industry. 280 amps of output is ideal for Stick electrodes up to 3/16 in and TIG welding of pipe and plate.



Easy voltage changeover between voltage ranges through a two-position manual switch. Conveniently located on the rear panel, it simplifies voltage change in racks.

Simple-to-operate **process selector knob automatically sets proper dig setting** on E6010 and E7018 electrodes providing superior Stick performance.

Lift-Arc™ start for TIG arc starts without the use of high frequency.

Fan-On-Demand™ cooling system operates only when needed providing power efficiency and noise reduction.

Stand-alone or rack-mounted.

Optional 4-pack or 8-pack rack often used in construction/shipyards is available for multi-operator applications. All controls including the power switch are located on front of machine for easy access. See page 55.

Remote amperage control provided through 14-pin receptacle on front of the machine. This permits use of standard amperage control devices.

Tweco- or Dinse-style connectors available. The Dinse-style includes one set of male connectors; the Tweco-style does not.

Industrial ● **CC DC 3 1**
Phase Phase

Processes

- Stick (SMAW)
- TIG (GTAW)

Most Popular Accessories

- CST 280 Rack (pg 55)
- RCC-14 Remote Control #151 086 (pg 82)
- RCCS-14 Remote Control #043 688 (pg 82)
- RFCS-14 Remote Control #043 554 (pg 82)
- RFCS-14 HD Remote Control #194 744 (pg 82)
- RHC-14 Remote Control #129 340 (pg 82)
- For TIG torches see Lit. Index No. DC/29.55

See your Miller distributor for other popular Miller options and accessories.

Note: Primary input current draw is limited to 50 A.

Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz							Max. Open-Circuit Voltage	Dimensions	Net Weight		
					208 V	220 V	230 V	400 V	440 V	460 V	575 V				KVA	KW
#907 244 Dinse-style 220-230/460-575 V #907 244-01-1 Tweco®-style 220-230/460-575 V	Stick/TIG	Three-Phase	5-280	280 A at 31.2 V, 35% Duty Cycle	—	35.0	34.2	—	—	17.8	14.7	14.6	77 VDC	H: 13½ in (343 mm) W: 7½ in (191 mm) D: 18 in (457 mm)	41 lb (18.6 kg)	
				200 A at 28 V, 100% Duty Cycle	—	23.3	22.5	—	—	11.7	9.7	9.6				6.4
		Single-Phase	5-200	200 A at 28 V, 50% Duty Cycle	—	43.9	43.0	—	—	—	—	10.1				6.6
				150 A at 26 V, 100% Duty Cycle	—	32.7	32.0	—	—	—	—	7.3				4.6
#907 251 Dinse-style 208-230/400-460 V #907 251-01-1 Tweco®-style 208-230/400-460 V	Stick/TIG	Three-Phase	5-280	280 A at 31.2 V, 35% Duty Cycle	36.0	33.0	28.8	19.8	18.0	17.5	—	14.0	67 VDC			
				200 A at 28 V, 100% Duty Cycle	23.5	23.0	22.8	13.5	12.0	12.7	—	10.2				6.9
		Single-Phase	5-200	200 A at 28 V, 50% Duty Cycle	43.9	43.3	43.0	—	—	—	—	9.9				6.5
				150 A at 26 V, 100% Duty Cycle	35.0	33.9	32.9	—	—	—	—	7.6				4.8

101 Ways To Improve Your Welding Skills

When it's time to take your welding skills to the next level—whether you're a newbie, a seasoned-pro or a supervisor—MillerWelds.com is the industry's leading resource. We're dedicated to helping you become a better welder because when you improve, we all win.

Whether you need some Stick welding repair tips, safety advice, guidance for MIG or TIG aluminum, how to plasma cut on street rods or learn about the benefits of Pulsed MIG, explore the "Resources" section of MillerWelds.com.



Turn your "inbox" into an "information box." Sign up for Miller's Power Click eNewsletter at MillerWelds.com/powerclick



TIG (GTAW)

First-time TIG welder? Then you have to check out the revolutionary new **Diversion™ 165** — it's the world's easiest AC/DC TIG welder! If you want how-to TIG aluminum advice, have questions about chrome-moly or need to know if Pulsed TIG really reduces cycle times, be sure to explore the TIG Welding Resources available on MillerWelds.com.

MillerWelds.com/TIG



Power Source Welding Performance

		AC/DC							DC			
		Diversion™ 165 (Pg 16)	Syncrowave® 200 (Pg 16)	Dynasty® 200 (Pg 18)	Syncrowave® 250 DX (Pg 17)	Syncrowave® 350 LX (Pg 17)	Dynasty® 350 (Pg 19)	Dynasty® 700 (Pg 19)	Maxstar® 150 (Pg 20)	Maxstar® 200 (Pg 21)	Maxstar® 350 (Pg 22)	Maxstar® 700 (Pg 22)
Output	Min. – Max. (Amps)	10–165 A	5–200 A	5–200 A (AC) 1–200 A (DC)	3–310 A	3–400 A	5–350 A	5–700 A	5–150 A	1–200 A	5–350 A	5–700 A
AC TIG Material Thickness	Min. – Max. (Aluminum and Magnesium)	.030–3/16"	.020–1/4"	.020–1/4"	.015–3/8"	.015–1/2"	.020–5/8"	.020–1"				
DC TIG Material Thickness	Min. – Max. (Mild Steel, Stainless Steel, and Exotic Metals)	.025–3/16"	.020–1/4"	.004–1/4"	.012–1/2"	.012–5/8"	.020–5/8"	.020–1"	.020–3/16"	.004–1/4"	.020–5/8"	.020–1"
Stick Max. Electrode Diameter	E6010–6011		3/16"	3/16"	1/4"	5/16"	5/16"	5/16"	1/8"	3/16"	5/16"	5/16"
	E6013		3/16"	3/16"	1/4"	5/16"	5/16"	5/16"	1/8"	3/16"	5/16"	5/16"
	E7018		5/32"	5/32"	7/32"	1/4"	1/4"	5/16"	1/8"	5/32"	1/4"	5/16"
	E7024		1/8"	1/8"	3/16"	1/4"	1/4"	5/16"	3/32"	1/8"	1/4"	5/16"
Stick Process Quality	E6010–6011		★	★★★★	★★	★★	★★★★	★★★★	★ 6011*	★★★★	★★★★	★★★★
	E6013		★★	★★★★	★★	★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
	E7018		★★	★★★★	★★	★★	★★★★	★★★★	★★	★★★★	★★★★	★★★★
	E7024		★	★★★★	★★	★★	★★★★	★★★★	★★	★★★★	★★★★	★★★★
Carbon Arc Gouging	Max. Electrode Diameter		5/32"	5/32"	3/16"	1/4"	1/4"	3/8"		5/32"	1/4"	3/8"
	Balance Control		●	●	●	●	●	●				
Features	AC Frequency			●			●	●				
	Pulse Capability		●	● DX Model	● Optional		●	●	● STH Model	● DX Model	●	●
	Generator Power Requirement	5.5 kW	12.5 kW	8.5 kW	22 kW	30 kW	13 kW	35 kW	5 kW	5.5 kW	12 kW	32 kW

ICON KEY

PROCESS QUALITY: ★ Good ★★ Better ★★★ Best
 New! or Improved! products appear in blue type. *For best results choose 6011.



NEW!

Diversion™ 165 AC/DC TIG

See Literature No. AD/1.5



Welding Capability

Not to scale.

Aluminum Min. — 0.030 in (0.75 mm)
Steel Min. — 0.025 in (0.6 mm)

Aluminum Max. — 3/16 in (4.8 mm)
Steel Max. — 3/16 in (4.8 mm)

Easy-to-understand operator interface. Power up, select material type, set material thickness range and start welding!

Inverter-based, AC/DC power source provides a more consistent welding arc while using less power.

Portable — at 50 lb it can be taken anywhere.

HF start for non-contact arc starting that eliminates tungsten and material contamination.

Fan-On-Demand™ cooling system only operates when needed to reduce noise and maintenance.

Auto-Postflow protects the weld end zone and electrode by optimizing postflow time based on welding amperage.

Advanced Squarewave AC provides a fast freezing weld puddle and deeper penetration.

*While idling.

Stock Number	Mode	Welding Amperage Range	Rated Output at 20% Duty Cycle	Amps Input at Rated Output, 60 Hz, 1-Phase	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
#907 005) 230 V, 50/60 Hz	AC	10–165	150 A at 16 VAC	230 V 21 A (.64)*	4.9 (.04)*	3.6 (.02)*	80	H: 17 in (433 mm) W: 9 7/8 in (251 mm) D: 23 7/8 in (608 mm)	50 lb (23 kg)
	DC	10–165	150 A at 16 VAC	230 V 23 A (.50)*	5.3 (.04)*	3.9 (.02)*			

Light Industrial **CC** AC/DC Phase 1

Process • TIG (GTAW)

Comes With

- Power source with primary cord and 50 A, 230 V plug
- 12-1/2 ft (3.8 m) Weldcraft® LS17 TIG torch with backcap, ceramic gas cup, 3/32 in (2.4 mm) collet and collet body, and 2% ceriated tungsten
- 12 ft (3.7 m) work lead with clamp
- Smith® Argon regulator/flow gauge with hose
- *TIG Welding for Dummies* book with content written by Miller
- Set-up and operation DVD
- Welding project blueprint for a machine cart/cylinder rack

Most Popular Accessories

- Running Gear/Cylinder Rack #770 187 (pg 75)
- RFCS-RJ45 Foot Pedal #300 432

See your Miller distributor for other popular Miller options and accessories.

Syncrowave® 200 AC/DC TIG and Stick

See Literature No. AD/4.4



Welding Capability

Not to scale.

Aluminum Min. — 0.020 in (0.5 mm)
Steel Min. — 0.020 in (0.5 mm)

Aluminum Max. — 1/4 in (6.4 mm)
Steel Max. — 1/4 in (6.4 mm)

Squarewave output with AC balance control features adjustable penetration and cleaning action while increasing arc stability on various aluminum alloys, and helps eliminate tungsten spitting and arc rectification.

Built-in pulse control enhances weld bead and puddle control for improved appearance and quality.

Dual digital meters with alpha-numeric displays allow for quick and easy viewing of welding and preset values of amperage and voltage.

Cable management system uses dual cable hangers and foot control storage conveniently attached to the power source side panels.

Auto-Postflow protects the weld end zone and electrode by optimizing postflow time based on welding amperage.

Fan-On-Demand™ cooling system only operates when needed to reduce noise and maintenance.

120 V auxiliary power receptacle for cooling system or small tools.

Syncro Start™ allows the operator to select Soft, Standard or Hot TIG HF starts to optimize the application according to tungsten diameter and material thickness.

Syncrowave 200 Runner (#907 308-01-1) shown.

Stock Number	Welding Amperage Range	Rated Output at 40% Duty Cycle	Amps Input at Rated Output, 60 Hz	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
#907 308) 208-230 V, 50/60 Hz #907 308-01-1) 208-230 V Runner #907 309) 460/575 V, 50/60 Hz #907 309-01-1) 460/575 V Runner	5 – 200	150 A at 26 V	208-230 V 460 V 575 V 54 27 22	12.5	6.0	80	H: 30 1/8 in (765 mm) W: 21 1/8 in (537 mm) D: 21 1/2 in (546 mm)	238 lb (108 kg)

Light Industrial **CC** Industrial

AC/DC Phase 1

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P)
- Stick (SMAW)
- Air Carbon Arc (CAC-A)

Comes With

- Power source
- 8 ft (2.4 m) primary cord (only with 208-230 V models)
- RFCS-14 remote foot pedal
- 12-1/2 ft (3.8 m) Weldcraft® WP17 TIG torch
- 15 ft (4.6 m) work lead with clamp
- 15 ft (4.6 m) lead w/electrode holder
- Flow gauge regulator with hose
- Cable and foot pedal holders

Runner™ Model Includes Above Plus

- No. 39 Running Gear

Most Popular Accessories

- No. 39 Running Gear #300 009 (pg 75)
- Coolmate™ 1 #300 360 (pg 76)
- Low-Conductivity Coolant #043 810 (pg 76)
- Water-Cooled TIG Torch Adapter #195 380 (pg 78)
- Protective Cover #300 059 (pg 81)
- Remote Controls (pg 82)

See your Miller distributor for other popular Miller options and accessories.



Syncrowave® 250 DX and 350 LX

AC/DC TIG and Stick

See Literature No. AD/4.2



Syncrowave 250 DX Welding Capability

Not to scale.

Aluminum Min. — 0.015 in (0.4 mm)
Steel Min. — 0.012 in (0.3 mm)

Aluminum Max. — 3/8 in (9.5 mm)
Steel Max. — 1/2 in (12.7 mm)

Syncrowave 350 LX Welding Capability

Not to scale.

Aluminum Min. — 0.015 in (0.4 mm)
Steel Min. — 0.012 in (0.3 mm)

Aluminum Max. — 1/2 in (12.7 mm)
Steel Max. — 5/8 in (15.9 mm)

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P) (optional on 250 DX, standard on 350 LX)
- Stick (SMAW)
- Air Carbon Arc (CAC-A)

Syncrowave 250 DX or 350 LX Comes With

- Power source
- (2) Dinse 50 mm connectors

Complete Package Includes Above Plus

- No. 37 Running Gear
- Coolmate™ 3X cooler
- Coolant (4 gallons)
- RFCS-14 remote foot pedal
- 25 ft (7.6 m) water-cooled torch (Syncro 250: Weldcraft® WP20) (Syncro 350: Weldcraft® CS310)
- Torch accessory kit with tungsten
- 15 ft (4.6 m) work lead with clamp
- 12 ft (3.7 m) gas hose
- Regulator/flowmeter
- Cable cover

Weldcraft® Water-Cooled Torch Kits

- 250 A Torch Kit #300 185 (pg 81)
- 300 A Torch Kit #300 183 (pg 81)
- 400 A Torch Kit #300 186 (pg 81)

Most Popular Accessories

- No. 37 Running Gear #195 282 (pg 75)
- Coolmate™ 3X with Cart and Dual Cylinder Rack #300 419 (pg 76)
- Low-Conductivity Coolant #043 810 (pg 76)
- TIG Torch Adapters (pg 78)
- Pulser Module #300 548 (pg 81) (250 model only)
- Sequencer Module #300 547 (pg 81)
- Protective Cover #195 320 (pg 81)
- Remote Controls (pg 82)

See your Miller distributor for other popular Miller options and accessories.

Squarewave output with AC balance control features adjustable penetration and cleaning action while increasing arc stability on various aluminum alloys, and helps eliminate tungsten spitting and arc rectification.

Syncro Start™ Technology for customized arc starts, allows for more precise arc starts and fine-tuning based on tungsten diameter and material thickness.

HF arc starting provides non-contact arc starting that eliminates tungsten or material contamination.

Lift-Arc™ start provides AC or DC arc starting without the use of high frequency.

120 V auxiliary power receptacle for cooling system or small tools.

Complete Package — One stock number provides all the necessary items required for a water-cooled TIG welding system. See above right for package contents. Note: shielding gas and primary cord required.

Coolmate™ 3X cooler (shown in Complete Package above) features a 3-gallon cooling system. A flow indicator provides visual indication that the system is working. Coolmate 3X is also equipped with an external filter to stop any foreign objects from entering the water-cooled torch cable for better flow and longer life.

Dual digital meters allow for quick and easy viewing of actual and preset values of amperage and voltage.

Last procedure recall automatically recalls the last procedure set-up when switching polarity.

Built-in preflow/postflow provides 0–5 seconds of preflow and 0–50 seconds of postflow.

Line voltage compensation keeps power source constant regardless of fluctuations in input power (±10%).

Built-in consumable storage drawer located on the front panel allows the operator to store and readily access necessary consumables to be more productive.

*More packages are available — see our Web site or Literature No. AD/4.2.

Add 12¾ inches height with Complete Package. *Add 139 pounds with Complete Package.

Model	Stock Number*	Welding Amp Range	Rated Output	Amps Input at AC Balanced Rated Load, 1-Phase (Syncro 250 DX, 60 Hz) (Syncro 350 LX, 50/60 Hz)				Max. Open-Circuit Voltage	Dimensions**	Net Weight***		
				200 V	230 V	460 V	575 V	KVA	KW			
Syncrowave 250 DX	(#907 194) 200/230/460 V, 50/60 Hz, Machine only	3–310	200 A at 28 VAC, 60% Duty Cycle	88	77	38	31	17.6	8.6	80	H: 36¼ in (921 mm) W: 22½ in (572 mm) D: 25 in (635 mm)	378 lb (172 kg)
	(#907 195) 230/460/575 V, 50/60 Hz, Machine only		250 A at 30 VAC, 40% Duty Cycle	110	96	48	38	21.98	11.76			
Syncrowave 350 LX	(#951 117) 200/230/460 V, 50/60 Hz, Complete	3–400	300 A at 32 VAC, 60% Duty Cycle	125	110	55	42	25	10.6	80	H: 36¼ in (921 mm) W: 22½ in (572 mm) D: 25 in (635 mm)	496 lb (225 kg)
	(#951 118) 230/460/575 V, 50/60 Hz, Complete		350 A at 34 VAC, 40% Duty Cycle	146	128	65	50	29.5	13.7			



Dynasty® 200 Series AC/DC TIG and Stick

See Literature No. AD/4.8

Welding Capability
Not to scale.

Aluminum Min. — 0.020 in (0.5 mm)
Steel Min. — 0.004 in (0.1 mm)

Aluminum Max. — 1/4 in (6.4 mm)
Steel Max. — 1/4 in (6.4 mm)

AC TIG Features

- **Extended AC balance** (30–99%) controls amount of oxide cleaning (amperage time in EN) which is essential for high quality welds on aluminum.
- **AC frequency** (20–250 hz) controls the width of the arc cone and the force of the arc.
- **NEW! Blue Lightning™**— High Frequency Arc Starter for non-contact arc initiation. Provides more consistent arc starts compared to traditional HF arc starters with greater reliability and no maintenance on solid state components. Preset parameters for tungsten sizes from .020–1/8 inch provide optimized starting for applications from thick to micro thin materials. For unique applications, custom settings are programmable. Easy to set and increases productivity.

NEW! AC Waveforms

- **Advanced Squarewave**, fast freezing puddle, deep penetration and fast travel speeds.
- **Soft Squarewave** for a soft buttery arc with maximum puddle control and good wetting action.
- **Sine wave** for customers that like a traditional arc. Quiet with good wetting.
- **Triangular wave** reduces the heat input and is good on thin aluminum. Fast travel speeds.

DC TIG Features

- **Exceptionally smooth** and precise arc for welding exotic materials.

AC/DC Stick Features

- **Tailored arc control (DIG)** allows the arc characteristic to be changed for specific applications and electrodes. Smooth running for 7018 or stiffer, more penetrating for 6010.
- **Hot Start™** adaptive control provides positive arc starts without sticking.
- **AC frequency control** adds additional stability when Stick welding in AC for smoother welds.

Improved!
AC Waveforms!



Dynasty 200 SD machine only



Dynasty 200 DX Foot Pedal Complete Package



Allows for any input voltage hook-up (120–460 V, single- or three-phase) with no manual linking, providing convenience in any job setting.

NEW! Complete Water-Cooled Packages —

One stock number provides all the necessary items required for a water-cooled TIG welding system. See above right for package contents.

Note: shielding gas required.

Portable in the shop or at the job site, the two-wheel cart makes it easy to maneuver the entire package to the work area. For more portability, detach the 45 lb welder and take it anywhere.

*Sense voltage for Stick and Lift-Arc™ TIG.

Note: Duty cycle limitations on units with 115 V input power are due to the input power cord supplied with the unit.

Industrial ● Heavy Industrial ●

CC AC/DC 3 1
Phase Phase

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P) w/DX model
- Stick (SMAW)
- Air Carbon Arc (CAC-A)

Two Models Available: SD and DX

Feature	SD	DX
Digital Meters	●	●
HF	●	●
Lift-Arc™	●	●
Trigger Options	●	●
Pulsar	●	●
Sequencer	●	●
Pre/Postflow	●	●
DIG	●	●
Wave Forms	●	●

Comes With

- Power source
- Adjustable shoulder strap
- 10 ft (3 m) primary cord
- (2) 50 mm Dinse connectors
- Air-cooled TIG torch adapter #195 378

Complete Package Includes Above Plus

- 2-Wheel Trolley Cart
- Coolmate™ 1 cooler (120 V)
- Coolant (1 gallon)
- RFCS-14 HD remote foot pedal or RCCS-14 fingertip
- 25 ft (7.6 m) Weldcraft® WP20 water-cooled torch
- Torch accessory kit with tungsten
- 15 ft (4.6 m) work lead with clamp
- 12 ft (3.7 m) gas hose
- Regulator/flowmeter
- Cable cover

Most Popular Accessories

- Universal Cart and Cylinder Rack #042 934 (pg 74)
- 2-Wheel Trolley Cart #300 480 (pg 74)
- Coolmate™ 1 #300 360 (pg 76)
- Low-Conductivity Coolant #043 810 (pg 76)
- TIG Torch Adapters (pg 78)
- Contractor Kits, 150 A TIG/Stick Pkg w/Fingertip #195 055 (pg 81) w/Foot Pedal #195 054 (pg 81)
- Water-Cooled Torch Kit, 250 A with WP20 TIG torch #300 185 (pg 81)

See your Miller distributor for other popular Miller options and accessories.

Model/Stock Number	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz						Max. Open-Circuit Voltage	Dimensions	Net Weight
					120 V	230 V	400 V	460 V	KVA	KW			
Dynasty 200 SD (#907 099)	TIG	Three-Phase	1–200	200 A at 18 V, 20% Duty Cycle	—	13.7	8.7	6.9	5.5	5.2	80 VDC (5–10 VDC*)	Machine: H: 13 1/4 in (343 mm) W: 7 1/2 in (191 mm) D: 21 1/2 in (546 mm)	Machine: 45 lb (20.5 kg)
				150 A at 16 V, 60% Duty Cycle	—	9.4	6.0	4.7	3.8	3.6			
		Single-Phase	1–200 (1–150 on 120 VAC)	150 A at 16 V, 60% Duty Cycle	—	15.8	—	7.9	3.6	3.6			
				140 A at 15.6 V, 40% Duty Cycle	31.0	—	—	—	3.6	3.5			
Dynasty 200 DX Complete Package (#951 139) Foot Pedal (#951 140) Fingertip	Stick	Three-Phase	1–200	200 A at 28 V, 20% Duty Cycle	—	20.8	13.0	10.2	8.1	7.8	Complete: H: 46 1/4 in (1175 mm) W: 23 1/2 in (597 mm) D: 22 1/4 in (565 mm)	Complete: 137 lb (62 kg)	
				130 A at 25.2 V, 60% Duty Cycle	—	12.3	7.6	6.0	4.8	4.6			
				100 A at 14 V, 100% Duty Cycle	20.7	—	—	—	2.3	2.3			
		Single-Phase	1–200 (1–105 on 120 VAC)	130 A at 25.2 V, 60% Duty Cycle	—	20.0	—	10.0	4.7	4.7			
				100 A at 24 V, 60% Duty Cycle	31.3	—	—	—	3.6	3.6			
				90 A at 23.6 V, 100% Duty Cycle	27.6	—	—	—	3.2	3.2			



Dynasty® 350 and 700 AC/DC TIG and Stick

See Literature No. AD/5.0



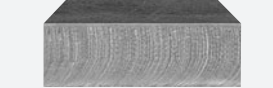
Machine only

Complete Package

Dynasty 350 Welding Capability

Not to scale.

Aluminum Min. — 0.020 in (0.5 mm)
Steel Min. — 0.020 in (0.5 mm)



Aluminum Max. — 5/8 in (15.9 mm)
Steel Max. — 5/8 in (15.9 mm)

Dynasty 700 Welding Capability

Not to scale.

Aluminum Min. — 0.020 in (0.5 mm)
Steel Min. — 0.020 in (0.5 mm)



Aluminum Max. — 1 in (25.4 mm)
Steel Max. — 1 in (25.4 mm)

NEW! Meter calibration for certification purposes.

AUTO-LINE Power Management Technology Allows any input voltage hook-up (208–575 V) with no manual linking, providing convenience in any job setting.

Wind Tunnel Technology™ protects internal electrical components from airborne contaminants, extending product life.

120 V auxiliary power receptacle for cooling system or small tools.

Program memory features 9 independent program memories that maintain/save your parameters.

Programmable start parameters allow independent starting conditions based on process and memory selections (amperage, time and polarity).

HF arc starting provides non-contact arc starting that eliminates tungsten or material contamination.

Lift-Arc™ start provides AC or DC arc starting without the use of high frequency.

Auto-Postflow calculates the length of postflow time based on the amperage setting. Eliminates need to independently set postflow time for different amperages, preserves tungsten and prevents porosity.

Complete Package — One stock number provides all the necessary items required for a water-cooled TIG welding system. See above right for package contents.

Note: shielding gas required. Primary cord not included on 700 model.

Optional Automation Interface Kit (#195 516) includes automation PC board, 28-pin socket receptacle with harness, and 28-pin plug connector. Provides required and advanced automation controls.

AC TIG Features

- **Independent Amplitude/Amperage Control** allows the EP and EN amperages to be set independently to precisely control heat input to the work and electrode.
- **Extended Balance** (30–99%) controls the amount of oxide cleaning (amperage time in EN) which is essential for high quality welds on aluminum.
- **AC Frequency** (20–400 Hz) controls the width of the arc cone and the force of the arc (directional control).
- **AC waveforms** include Advance Squarewave, Soft Squarewave, Sine Wave and Triangular Wave for the ultimate in control.

DC TIG Features

- **Exceptionally smooth and precise arc** for exotic materials.
- **High-Speed DC TIG Pulse Controls** up to 5000 p/p/sec.

AC/DC Stick Features

- **Tailored arc control (DIG)** allows arc characteristics to be changed for specific application and electrode. Smooth running for 7018 or stiffer, more penetrating for 6010.
- **Hot Start™** adaptive control provides positive arc starts without electrode sticking.
- **AC frequency control** adds additional stability when Stick welding in AC for smoother welds.

*More packages are available — see our Web site or Literature No. AD/5.0. **Sense voltage for Low OCV Stick and Lift-Arc™ TIG.

Heavy Industrial

CC AC 3 1
DC Phase Phase

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P)
- Stick (SMAW)
- Air Carbon Arc (CAC-A)

Dynasty 350 Comes With

- Power source
- 8 ft (2.4 m) primary cord
- (2) Dinse 50 mm connectors
- (1) Set-up and operation CD

Dynasty 700 Comes With

- Power source
- (1) thread lock torch adapter
- (2) thread lock weld cable connectors
- (1) Set-up and operation CD

Complete Packages Include Above Plus

- Runner™ cart
- Coolmate™ 3.5 cooler
- Coolant (4 gallons)
- RFCS-14 HD remote foot pedal
- 25 ft (7.6 m) water-cooled torch (350: Weldcraft® CS310) (700: Weldcraft® WP18SC)
- Torch accessory kit with tungsten
- 15 ft (4.6 m) work lead with clamp
- 12 ft (3.8 m) gas hose
- Regulator/flowmeter
- Cable cover

Weldcraft® Water-Cooled Torch Kits

- 250 A Torch Kit #300 185 (pg 81)
- 300 A Torch Kit #300 183 (pg 81)
- 400 A Torch Kit #300 186 (pg 81)

Most Popular Accessories

- **Runner™ Cart #300 244 (pg 74)**
- **Coolmate™ 3.5 Cooler #300 245 (pg 76)**
- Low-Conductivity Coolant #043 810 (pg 76)
- Remote Controls (pg 82)



See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number*	Input Power	Welding Amperage Range	Amps Input at Rated Load Output, 50/60 Hz							Max. Open-Circuit Voltage	Dimensions	Net Weight	
				Rated Output	208 V	230 V	400 V	460 V	575 V	KVA				KW
Dynasty 350	#907 204 Machine only	Three-Phase	5–350	250 A at 30 V, 100% Duty Cycle	29	26	15	13	10	10.3	9.9	75 VDC (10–15 VDC**)	Machine: H: 24¾ in (629 mm) W: 13¾ in (349 mm) D: 22 in (559 mm) Complete: H: 45½ in (1146 mm) W: 23½ in (587 mm) D: 43¾ in (1111 mm)	Machine: 135 lb (61 kg) Complete: 308 lb (140 kg)
				300 A at 32 V, 60% Duty Cycle	35	32	16	16	13	12.7	12.1			
	#951 074 Complete	Single-Phase	180 A at 27.2 V, 100% Duty Cycle	35	32	—	15	12	7.4	6.8				
			225 A at 29 V, 60% Duty Cycle	47	43	—	21	17	9.8	9.1				
Dynasty 700	#907 101 Machine only	Three-Phase	5–700	500 A at 40 V, 100% Duty Cycle	75	68	39	34	27	27	26	75 VDC (10–15 VDC**)	Machine: H: 34½ in (876 mm) W: 13¾ in (349 mm) D: 22 in (559 mm) Complete: H: 55½ in (1400 mm) W: 23½ in (587 mm) D: 43¾ in (1111 mm)	Machine: 198 lb (90 kg) Complete: 370 lb (168 kg)
				600 A at 44 V, 60% Duty Cycle	97	88	51	44	35	35	34			
	#951 075 Complete	Single-Phase	360 A at 34 V, 100% Duty Cycle	82	74	—	37	30	17	16				
			450 A at 38 V, 60% Duty Cycle	115	104	—	52	42	24	22				

Maxstar® 150

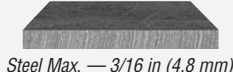
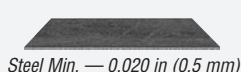
STL — DC Stick/TIG Lift-Arc See Literature No. DC/27.1
STH — DC Stick/TIG HF Start See Literature No. DC/27.2



Maxstar 150 STH TIG/Stick Package with Remote and Case (#907 136-01-7) shown.

Welding Capability

Not to scale.



Two models available —

STL: DC TIG/Stick with Lift-Arc™ starting without the use of high frequency.

STH: DC TIG/Stick with HF and Lift-Arc™ starting, plus built-in pulsing with a selection of four fixed-pulse frequencies.

Auto-Line™ circuitry automatically connects to 115–230 V, single-phase power without removing the covers to relink the power source.

Miller's exclusive **multi-voltage plug (MVP™)** allows connection to 115 or 230 V receptacles without tools—choose the plug that fits the receptacle and connect it to the power cord.

Portable in the shop or at the job site at 13.7 lb.

Low OCV Stick™ reduces open-circuit voltage to 12–16 VDC when power source is not in use.

Single amperage range allows operator to accurately set amperage on both 115 or 230 V primary power.

Built-in gas solenoid eliminates the need for bulky torch with a gas valve.

Light Industrial **CC DC 1** Phase

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P) w/STH model
- Stick (SMAW)

Standard Pkgs Come With

- Power source, cord and MVP™ plugs
- 10 ft (3 m) work clamp with 25 mm Dinse connector
- 13 ft (4 m) Stick electrode holder with 25 mm Dinse connector
- Shoulder strap

Stick/TIG Pkgs Include Above Plus

- Weldcraft® WP1712RDI25 TIG torch with adapter
- Protective carrying case
- Smith® regulator with gas hose

Most Popular Accessories

- MVP™ Plugs (pg 80)
- Travel Paks™ (pg 81)



See your Miller distributor for other popular Miller options and accessories.

*See page 13 in the Stick section for Maxstar 150 S.

**Sense voltage for Stick and Lift-Arc™ TIG.

Model/Stock Number*	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Output, 50/60 Hz	KVA at Duty Cycle	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
Maxstar 150 STL (#907 135) Standard Package (#907 135-01-6) TIG/Stick Package (#907 135-01-7) TIG/Stick Package with Remote Fingertip Control (#195 184)	TIG	115 VAC	5–150	100 A at 14 VDC, 100% Duty Cycle	18.4	2.1	2.1	90 VDC (12–16 VDC**)	H: 9 in (229 mm) W: 5½ in (140 mm) D: 13¼ in (337 mm)	13.7 lb (6.2 kg)
				150 A at 16 VDC, 30% Duty Cycle	28.0	3.4	3.1			
	230 VAC	5–150	100 A at 14 VDC, 100% Duty Cycle	8.3	2.0	1.9				
			150 A at 16 VDC, 30% Duty Cycle	14.2	3.2	3.1				
Maxstar 150 STH (#907 136) Standard Package (#907 136-01-7) TIG/Stick Package with Remote Fingertip Control (#195 184)	Stick	115 VAC	20–100	70 A at 22.8 VDC, 100% Duty Cycle	17.4	2.0	1.9	90 VDC (12–16 VDC**)		
				100 A at 24 VDC, 35% Duty Cycle	26.4	3.0	3.0			
	230 VAC	20–150	100 A at 24 VDC, 100% Duty Cycle	13.1	3.0	2.8				
			150 A at 26 VDC, 30% Duty Cycle	21.6	4.9	4.7				

Meet Me At MillerWelds.com

The Miller Online Community believes in sharing information with others...and that means you! With three active forums — welding discussions, welding projects and motorsports — there's a meeting spot for everyone. Want to share your point of view on industrial welding issues? It's easy. Visit the Viewpoints Blog (MillerWelds.com/viewpoints) and voice your opinion on today's most important welding issues.



Turn your "inbox" into an "information box." Sign up for Miller's Power Click eNewsletter at MillerWelds.com/powerclick



Maxstar® 200 Series DC TIG and Stick

See Literature No. DC/32.0

Industrial ● Heavy Industrial ●
CC DC 3 1
Phase Phase

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P) with DX and LX models
- Stick (SMAW)
- Air Carbon Arc (CAC-A)

Three Models Available: SD, DX and LX

Feature	SD	DX	LX
Digital Meters	●	●	●
HF	●	●	●
Lift-Arc™	●	●	●
Trigger Options	●	●	●
Pulsar	●	●	●
Sequencer	●	●	●
Pre/Postflow	●	●	●
DIG	●	●	●
Automation	●	●	●
Connection	●	●	●

Comes With

- Power source
- Adjustable shoulder strap
- 10 ft (3 m) primary cord
- (2) 50 mm Dinse connectors
- Air-cooled TIG torch adapter #195 378

Complete Package Includes Above Plus

- 2-Wheel Trolley Cart
- Coolmate™ 1 cooler (120 V)
- Coolant (1 gallon)
- RFCS-14 HD remote foot pedal or RCCS-14 fingertip
- 25 ft (7.6 m) Weldcraft® WP20 water-cooled torch
- Torch accessory kit with tungsten
- 15 ft (4.6 m) work lead with clamp
- 12 ft (3.7 m) gas hose
- Regulator/flowmeter
- Cable cover

Most Popular Accessories

- Universal Cart and Cylinder Rack #042 934 (pg 74)
- 2-Wheel Trolley Cart #300 480 (pg 74)
- Coolmate™ 1 #300 360 (pg 76)
- Low-Conductivity Coolant #043 810 (pg 76)
- TIG Torch Adapters (pg 78)
- Contractor Kits, 150 A TIG/Stick Pkg w/Fingertip #195 055 (pg 81) w/Foot Pedal #195 054 (pg 81)
- Water-Cooled Torch Kit, 250 A with WP20 TIG torch #300 185 (pg 81)

See your Miller distributor for other popular Miller options and accessories.



Maxstar 200 SD machine only

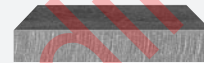


Welding Capability

Not to scale.



Steel Min. — 0.004 in (0.1 mm)



Steel Max. — 1/4 in (6.4 mm)

Maxstar 200 DX Fingertip Complete Package



Allows for any input voltage hook-up (120–460 V, single- or three-phase) with no manual linking, providing convenience in any job setting.

NEW! Complete Water-Cooled Packages — One stock number provides all the necessary items required for a water-cooled TIG welding system. See above right for package contents.

Note: shielding gas required.

Portable in the shop or at the job site, the two-wheel cart makes it easy to maneuver the entire package to the work area. For more portability, detach the 37 lb welder and take it anywhere.

DC TIG Features

- **Exceptionally smooth** and precise arc for welding exotic materials.
- **NEW! Blue Lightning™** — High Frequency Arc Starter for non-contact arc initiation. Provides more consistent arc starts compared to traditional HF arc starters with greater reliability and no maintenance on solid state components. Preset parameters for tungsten sizes from .020–1/8 inch provide optimized starting for applications from thick to micro thin materials. For unique applications, custom settings are programmable. Easy to set and increases productivity.

DC Stick Features

- **Tailored arc control (DIG)** allows the arc characteristic to be changed for specific applications and electrodes. Smooth running for 7018 or stiffer, more penetrating for 6010.
- **Hot Start™** adaptive control provides positive arc starts without sticking.

*See page 13 in the Stick section for Maxstar 200 STR.

**Sense voltage for Stick and Lift-Arc™ TIG.

Model/ Stock Number*	Welding Process	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz								Max. Open- Circuit Voltage	Dimensions	Net Weight	
					120 V	200 V	230 V	400 V	440 V	460 V	KVA	KW				
Maxstar 200 SD (#903 701) Maxstar 200 DX (#903 701-01-1) Maxstar 200 LX (#903 701-01-2) Maxstar 200 DX Complete Package (#951 137) Foot Pedal (#951 138) Fingertip	TIG	Three-Phase	1–200	175 A at 17 V, 60% Duty Cycle	—	12.1	10.5	6.0	5.3	5.2	4.2	4.0	70 VDC (9–14 VDC**)	Machine: H: 13½ in (343 mm) W: 7½ in (191 mm) D: 17½ in (445 mm) Complete: H: 46¼ in (1175 mm) W: 23½ in (597 mm) D: 22¼ in (565 mm)	Machine: 37 lb (16.8 kg) Complete: 129 lb (59 kg)	
			Single-Phase	1–200 (1–150 on 120 V)	175 A at 17 V, 60% Duty Cycle 150 A at 16 V, 70% Duty Cycle 110 A at 15 V, 100% Duty Cycle	—	19.9	17.4	—	—	—	—				4.0
		Stick	Three-Phase	1–200	150 A at 26 V, 60% Duty Cycle	—	14.7	13.1	7.4	6.6	6.4	5.2				5.0
			Single-Phase	1–200 (1–90 on 120 V)	150 A at 26 V, 60% Duty Cycle 125 A at 25 V, 50% Duty Cycle 90 A at 24 V, 100% Duty Cycle	—	24.9	21.7	—	—	—	—				5.0

Maxstar® 350 and 700 DC TIG and Stick

See Literature No. DC/24.0

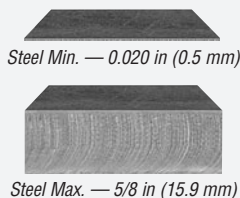


Maxstar 350

Maxstar 700

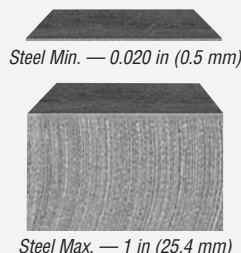
Maxstar 350 Welding Capability

Not to scale.



Maxstar 700 Welding Capability

Not to scale.



DC TIG Features

- Exceptionally smooth and precise arc for welding exotic materials.
- High-Speed DC TIG Pulse Controls capable of 5000 pulses per second.

DC Stick Features

- Tailored arc control (DIG) allows arc characteristics to be changed for specific application and electrode. Smooth running for 7018 or stiffer, more penetrating for 6010.
- Hot Start™ adaptive control provides positive arc starts without electrode sticking.

NEW! Meter calibration for certification purposes.



Allows for any input voltage hook-up (208–575 V) with no manual linking, providing convenience in any job setting.

Wind Tunnel Technology™ protects internal electrical components from airborne contaminants, extending product life.

Fan-On-Demand™ cooling system only operates when needed to reduce noise, energy use and contaminants pulled through the machine.

120 V auxiliary power receptacle for cooling system or small tools.

Program memory features 9 independent program memories that maintain/save your parameters.

Programmable start parameters allow independent starting conditions based on process and memory selections (amperage and time).

HF arc starting provides non-contact arc starting that eliminates tungsten or material contamination.

Lift-Arc™ start provides DC arc starting without the use of high frequency.

Auto-Postflow calculates the length of postflow time based on the amperage setting. Eliminates need to independently set postflow time for different amperages, preserves tungsten and prevents porosity.

Complete Package — One stock number provides all the necessary items required for a water-cooled TIG welding system. See above right for package contents.

Note: shielding gas required. Primary cord not included on 700 model.

Optional Automation Interface Kit (#195 516) includes automation PC board, 28-pin socket receptacle with harness, and 28-pin plug connector. Provides required and advanced automation controls.

Heavy Industrial
CC DC 3 1
Phase Phase

Processes

- TIG (GTAW)
- Pulsed TIG (GTAW-P)
- Stick (SMAW)
- Air Carbon Arc (CAC-A)

Maxstar 350 Comes With

- Power source
- 8 ft (2.4 m) primary cord
- (2) Dinse 50 mm connectors
- (1) Set-up and operation CD

Maxstar 700 Comes With

- Power source
- (1) thread lock torch adapter
- (2) thread lock weld cable connectors
- (1) Set-up and operation CD

Maxstar 350 Complete Package Includes Above Plus

- Runner™ cart
- Coolmate™ 3.5 cooler
- Coolant (4 gallons)
- RFCS-14 HD remote foot pedal
- 25 ft (7.6 m) Weldcraft® CS310 water-cooled torch
- Torch accessory kit with tungsten
- 15 ft (4.6 m) work lead with clamp
- 12 ft (3.8 m) gas hose
- Regulator/flowmeter
- Cable cover

Weldcraft® Water-Cooled Torch Kits

- 250 A Torch Kit #300 185 (pg 81)
- 300 A Torch Kit #300 183 (pg 81)
- 400 A Torch Kit #300 186 (pg 81)

Most Popular Accessories

- Runner™ Cart #300 244 (pg 74)
- Coolmate™ 3.5 Cooler #300 245 (pg 76)
- Low-Conductivity Coolant #043 810 (pg 76)
- Remote Controls (pg 82)



See your Miller distributor for other popular Miller options and accessories.

*More packages are available — see our Web site or Literature No. DC/24.0. **Sense voltage for Low OCV Stick and Lift-Arc™ TIG.

Model	Stock Number*	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz					Max. Open-Circuit Voltage	Dimensions	Net Weight		
					208 V	230 V	400 V	460 V	575 V				KVA	KW
Maxstar 350	#907 334 Machine only #951 073 Complete	Three-Phase	5–350	250 A at 30 V, 100% Duty Cycle	27	24	14	12	9	9.7	9.3	75 VDC (10–15 VDC**)	Machine: H: 24¾ in (629 mm) W: 13¾ in (349 mm) D: 22 in (559 mm) Complete: H: 45½ in (1146 mm) W: 23½ in (587 mm) D: 43¾ in (1111 mm)	Machine: 135 lb (61 kg) Complete: 308 lb (140 kg)
				300 A at 32 V, 60% Duty Cycle	33	30	17	15	12	12	11.5			
		Single-Phase	180 A at 27.2 V, 100% Duty Cycle	32	29	—	14	11	6.4	6				
			225 A at 29 V, 60% Duty Cycle	41	37	—	19	15	8.6	8.2				
Maxstar 700	#907 103 Machine only	Three-Phase	5–700	500 A at 40 V, 100% Duty Cycle	67	60	35	30	24	24	23	75 VDC (10–15 VDC**)	Machine: H: 34½ in (876 mm) W: 13¾ in (349 mm) D: 22 in (559 mm)	Machine: 198 lb (90 kg)
				600 A at 44 V, 60% Duty Cycle	89	80	46	40	32	32	31			
		Single-Phase	360 A at 34 V, 100% Duty Cycle	77	70	—	35	28	16	15				
			450 A at 38 V, 60% Duty Cycle	106	96	—	48	38	22	21				



MIG (GMAW)

If you need to select your first MIG welder, assess the efficiency of your MIG welder fleet or train MIG operators. Miller has the Web resources to help you out. In fact, videos and animation make the MillerWelds.com site a “must see.” You’ll get set-up guides and control panel simulators, customer testimonials, Smart Selector guides for personal users and much, much more!



MillerWelds.com/MIG

Product Guide

Page	Class	MIG	MIG-P	Flux Core*	CAC-A	Portability	Weldable Metals	Welding Output Range	Special Features	Typical Applications	
25	●	●	●	●		Handle, optional running gear	Steel, stainless, aluminum	30–140 A	115 VAC input, Auto-Set™, Smooth-Start™	Up to 3/16 in** maintenance/repair, auto body, hobby	
25	●	●	●	●				30–180 A	230 VAC input, Auto-Set™, Smooth-Start™	Up to 5/16 in*** maintenance/repair, auto body, hobby	
26	●	●	●	●		Handle		30–180 A	Welds on 115 or 230 V input, includes 12 oz gas cylinder inside power source	Up to 3/8 in*** maintenance/repair, fabrication, auto body, farm/home, construction	
26	●	●	●	●		Installed running gear		30–210 A	Welds on 115 or 230 V input, Auto-Set™, Smooth-Start™	Up to 3/8 in*** maintenance/repair, auto body, hobby	
27	●	●	●	●				30–175 A	Ability to weld on 115 or 230 V input	Up to 3/8 in*** maintenance/repair, auto body, hobby	
27	●	●	●	●				30–210 A	Gun-On-Demand™	Up to 3/8 in*** fabrication, farm, garage/body shops	
28	●	●	●	●				30–300 A	Standard timers menu, Fan-On-Demand™, can connect standard MIG or push-pull gun	Up to 1/2 in*** industrial production/fabrication, farm	
48	●	●	●	●		Lift eye, optional running gear		5–400 A 10–35 V	Variable inductance control	Equip/auto mfg, metal fab, construction, agri equipment, education	
57	●	See the Engine-Driven section on page 56.									
29	●	●	●	●		Installed running gear	Steel, stainless, aluminum	25–400 A	Can connect a standard MIG gun or push-pull gun	Up to 1/2 in*** industrial production/fabrication	
29	●	●	●	●						Up to 1/2 in*** industrial production/fabrication, Pulsed MIG ideal for thin gauge aluminum	
33	●	●	●	●		Handles, optional cart, MIGRunner	Most metals	5–425 A 10–38 V	76 lb inverter, built-in pulsing control	Manufacturing and production	
50	●	See the Multiprocess section on page 47.									
31	●	●	●	●		Lift eye, optional running gear, MIGRunner	Most metals	14–44 V	Hi/Lo stabilizer, power efficient	Equip/auto mfg, metal fab, construction, agri equipment	
31	●	●	●	●				10–45 V	Material-specific output terminals	Light to medium fabrication, manufacturing	
32	●	●	●	●				15–32 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment	
32	●	●	●	●	1/4			15–38 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment	
32	●	●	●	●	3/8			15–44 V	Power efficient, material-specific output terminals	Equip/auto mfg, metal fab, construction, agri equipment	
33	●	●	●	●	1/4	Handles, optional cart, MIGRunner		10–38 V	Pulsing made easy	Metal fabrication, manufacturing	
33	●	●	●	●	1/4			10–38 V	600 A max output, power efficient	Industrial production, manufacturing	
34	●	●	●	●		Optional cart, MIGRunner		10–44 V	Auto-Line™, Accu-Pulse™	Manufacturing and production	
34	●	●	●	●	1/4			10–44 V	Auto-Line™, Accu-Pulse™	Manufacturing and production	
34	●	●	●	●	3/8			10–44 V	Auto-Line™, Accu-Pulse™	Manufacturing and production	
48	●	See the Multiprocess section on page 47.									
52	●	See the PipeWorx Welding System on page 52.									

1-Phase

1 & 3-Phase

3-Phase

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process
 New! or improved! products appear in blue type. *If using self-shielded wire on a CC/CV machine, use CV weld output. **In a single pass using self-shielded wire. ***In a single pass.
 For more detailed information, see individual specification sheets.

Millermatic® Series

Whether it's thick steel or thin aluminum, conventional MIG or Pulsed MIG, the Millermatic line combines easy-to-use features with ultimate arc performance to give you the best all-in-one MIG welders in the industry.

Auto-Set™ Available on Millermatic 140, 180, 211 and 212.

The right setting automatically —

- Set the wire diameter, a blue light shows that Auto-Set is activated
- Dial in the thickness of what you're welding
- Start welding with the exact parameters you need!



No more burnthrough and rework — Correct Auto-Set parameters make it easy to get quality welds, every time.

Weld flexibility with infinite voltage control — You also have the flexibility to manually adjust weld parameters to the exact settings you want. This comes in handy for broader welding applications such as aluminum or stainless steel.

Aluminum solutions — Whether you purchase a Millermatic 140 Auto-Set and a Spoolmate 100 Series spool gun or a Millermatic 350P with an Aluma-Pro push-pull gun, the entire Millermatic product line now offers an aluminum solution for your application.

Material thickness gauge — To help select parameters every Millermatic that features Auto-Set now comes with a material thickness gauge.

Aluminum drive systems — Every Millermatic features a heavy-duty aluminum drive system designed to provide superior feeding and durability. The toolless, quick-change reversible drive rolls and easy-to-set scaled tension knob make them the easiest to use in the industry.

Thermal overload protection — Designed to protect your investment, every Millermatic is now equipped with built-in thermal overload protection... not that you'll need it.

Set-up and operation CD — Miller makes it easy to get started. Every Millermatic comes standard with a CD that goes through the basics of how to set up and operate your machine to get optimal results.

True Blue® 3-year warranty — You should never have an issue with your Millermatic... but just in case. Welder is warranted for three years, parts and labor. Original main power rectified parts are warranted for five years. Gun is warranted for 90 days parts and labor.



SMART Selector

Product Selection-Made Easy!

An online product selection tool designed specifically for the personal user or light fabricator. With this new tool, customers can simply select their process, answer a few questions, and find the right welder or plasma cutter for their needs. It's easy, it's fast, it's smart — it's the Smart Selector. Check it out at MillerWelds.com/select

Millermatic® Product Selector

Machine	Thickness of Steel Welded in a Single Pass						Features
	Thin Gauge	3/16 in	1/4 in	5/16 in	3/8 in	1/2 in	
Millermatic® 350/350P			200/230/460 or 460/575 VAC 300 A at 60% Duty Cycle, 1-Phase or 3-Phase				<ul style="list-style-type: none"> • Pulsed MIG (P Model) • Push-Pull Gun/Spool Gun Ready
Millermatic® 252			208/230 VAC or 230/460/575 VAC 200 A at 60% Duty Cycle				<ul style="list-style-type: none"> • Standard Timers Menu • Push-Pull Gun/Spool Gun Ready for Alum Apps
Millermatic® 212 Auto-Set™			208/230 VAC 160 A at 60% Duty Cycle				<ul style="list-style-type: none"> • Auto-Set™ • Gun-On-Demand™ • Spool Gun Ready for Aluminum Applications
Millermatic® DVI™	115 VAC: 90 A at 20% Duty Cycle			230 VAC 150 A at 40% Duty Cycle			<ul style="list-style-type: none"> • MVP™ Plug • Dual Voltage Input • Spool Gun Compatible
Millermatic® 211 Auto-Set™ w/MVP™	115 VAC: 90 A at 20% Duty Cycle			230 VAC 150 A at 30% Duty Cycle			<ul style="list-style-type: none"> • MVP™ Plug • Dual Voltage Input • Auto-Set™ • Spool Gun Compatible
Millermatic® Passport® Plus	115 VAC: 110 A at 20% Duty Cycle			230 VAC 150 A at 20% Duty Cycle			<ul style="list-style-type: none"> • MVP™ Plug • Auto-Line™ • Spool Gun Ready • 45 lb
Millermatic® 180 Auto-Set™		230 VAC 130 A at 30% Duty Cycle					<ul style="list-style-type: none"> • Auto-Set™ • Spool Gun Compatible
Millermatic® 140 Auto-Set™	115 VAC 90 A at 20% Duty Cycle						<ul style="list-style-type: none"> • Auto-Set™ • Spool Gun Compatible

Millermatic® 140 Auto-Set™

See Literature No. DC/12.42



Welding Capability
Not to scale.

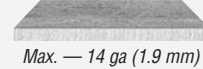
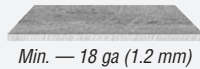


Mild Steel



Aluminum

w/Spoolmate 100 Series Spool Gun



Auto-Set™—the exclusive Auto-Set feature makes set up quick and easy (for more info see pg 24).

Infinite voltage adjustment provides broader operating range with finer control than a tap machine.

Smooth-Start™ patent-pending technology provides smooth, spatter-free starts—no pop gun starts and no spatter to clean up.

“Tip Saver” shuts down output when tip is shorted to the work. Extends contact tip life and protects internal components from damage.

Heavy duty aluminum drive system (for more info see pg 24).

Uses 4 or 8 in (102 or 203 mm) spools.

Recommended aluminum solution:
Spoolmate 100 Series #300 371.

*Dimensions and net weight are for machine only.

Light Industrial ● CV DC 1 Phase

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 10 ft (3 m) M-10 MIG gun and cable assembly (#195 605)
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid valve
- Smith® regulator and gas hose
- 6 ft (1.8 m) power cord with plug
- Dual groove quick-change drive rolls for .024 in (0.6 mm) or .030/.035 in (0.8/0.9 mm) wire
- Extra contact tips, Hobart® spool of solid wire, information/settings chart, set-up/operation CD and material thickness gauge (#229 895)

Most Popular Accessories

- Spoolmate™ 100 Series #300 371 (pg 41)
- Running Gear/Cylinder Rack (pg 75) Small #300 425 Regular #770 187
- Protective Cover #195 149 (pg 78)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number	Amperage Range	Rated Output at 20% Duty Cycle	Amps Input at Rated Output, 60 Hz			Wire Feed Speed	Wire Type and Diameter	Dimensions*	Net Weight*
			115 V	KVA	KW				
#907 335) 115 V #907 335-01-1) 115 V with Small Running Gear/Cyl. Rack	30–140	90 A at 18 VDC	20	2.8	2.4	15–390 IPM (0.4–9.9 m/min)	Solid Steel: .024–.030 in (0.6–0.8 mm)	H: 15¾ in (400 mm) W: 10⅞ in (270 mm) D: 17½ in (445 mm)	60 lb (27 kg)
		63 A at 21 VDC	15	2.1	1.8		Stainless: .024–.030 in (0.6–0.8 mm) Flux Cored: .030–.035 in (0.8–0.9 mm)		

Millermatic® 180 Auto-Set™

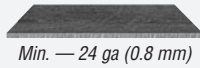
See Literature No. DC/12.44



Welding Capability
Not to scale.

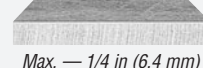
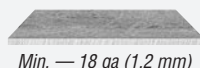


Mild Steel



Aluminum

w/Spoolmate 100 Series Spool Gun



Welds thickest material in its class—up to 5/16 in (7.9 mm) in a single pass!

Auto-Set™—the exclusive Auto-Set feature makes set up quick and easy (for more info see pg 24).

Infinite voltage adjustment provides broader operating range with finer control than a tap machine.

Smooth-Start™ patent-pending technology provides smooth, spatter-free starts—no pop gun starts and no spatter to clean up.

“Tip Saver” shuts down output when tip is shorted to the work. Extends contact tip life and protects internal components from damage.

Heavy duty aluminum drive system (for more info see pg 24).

Uses 4 or 8 in (102 or 203 mm) spools.

Recommended aluminum solution:
Spoolmate 100 Series #300 371.

*Dimensions and net weight are for machine only.

Light Industrial ● CV DC 1 Phase

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 10 ft (3 m) M-10 MIG gun and cable assembly (#195 605)
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid valve
- Smith® regulator and gas hose
- 6 ft (1.8 m) power cord with plug
- Dual groove quick-change drive rolls for .024 in (0.6 mm) or .030/.035 in (0.8/0.9 mm) wire
- Extra contact tips, Hobart® spool of solid wire, information/settings chart, set-up/operation CD and material thickness gauge (#229 895)

Most Popular Accessories

- Spoolmate™ 100 Series #300 371 (pg 41)
- Running Gear/Cylinder Rack (pg 75) Small #300 425 Regular #770 187
- Protective Cover #195 149 (pg 78)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz			Wire Feed Speed	Wire Type and Diameter	Dimensions*	Net Weight*
			230 V	KVA	KW				
#907 312) 230 V #907 312-01-1) 230 V with Small Running Gear/Cyl. Rack	30–180	135 A at 22.5 VDC, 30% Duty Cycle	21.7	5.0	4.1	40–460 IPM (1.0–11.7 m/min)	Solid Steel: .024–.035 in (0.6–0.9 mm)	H: 15¾ in (400 mm) W: 10⅞ in (270 mm) D: 17½ in (445 mm)	72 lb (33 kg)
							Stainless: .024–.035 in (0.6–0.9 mm) Flux Cored: .030–.045 in (0.8–1.2 mm)		

Millermatic® Passport® Plus

See Literature
No. DC/12.53



Welding Capability
Not to scale.

Mild Steel

Min. — 24 ga (0.8 mm)

Max. — 3/8 in (9.5 mm)

Aluminum

w/Spoolmate 100
Series Spool Gun

Min. — 18 ga (1.2 mm)

Max. — 1/4 in (6.4 mm)

Portability is #1 because not all jobs can come to you—weighing in at 45 lb and running either 115 or 230 V, the Passport Plus is great for steel, aluminum and stainless steel jobs you need to go to.



Multi-Voltage Plug (MVP™)—Miller's exclusive MVP allows connection to 115 or 230 V receptacles without tools.

Excellent arc characteristics! Unit offers positive arc starts and an extremely stable arc with minimal spatter on both mixed gases and straight CO₂.

Flexibility to use either external or internal gas cylinder. Self-contained gas cylinder provides 25 minutes of arc time or about 25 ft of weld on 3/16 in thick material with .030 in mild steel wire.

Auto-Line™ provides state-of-the-art flexibility, automatically connecting to 115/230 VAC, single-phase power.

Impact-resistant polymer case provides strength and durability while protecting the internal components and welding wire.

Recommended aluminum solution:
Spoolmate 100 Series #300 371.

Light Industrial ● **CV DC 1**
Phase

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 10 ft (3 m) power cord and MVP™ adapter plugs for 115 and 230 V
- 10 ft (3 m) M-10 MIG gun and cable assembly #195 605
- 10 ft (3 m) work cable with clamp
- One CO₂ gas cylinder (empty)
- Dual-groove, quick-change drive rolls for .024 in (0.6 mm) and .030/.035 in (0.8/0.9 mm) wire
- Two contact tips for .024 in (0.6 mm) wire and two for .030 in (0.8 mm) wire

Most Popular Accessories

- Spoolmate™ 100 Series #300 371 (pg 41)
- CO₂ Gas Cylinder (empty) #195 272
- MVP™ Plugs (pg 80)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number (#907 401) 115/230 VAC	Input Power	Amperage Range	Rated Output at 20% Duty Cycle	Amps Input at Rated Output, 50/60 Hz		Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight		
	115 VAC	30–140	110 A at 19.5 V	115 V	230 V					KVA	KW
	230 VAC	30–180	150 A at 21.5 V	—	18	4.0	3.8	40–400 IPM (1.0–10 m/min)	Solid Steel: .023–.030 in (0.6–0.8 mm) Stainless: .023–.030 in (0.6–0.8 mm) Flux Cored: .030–.035 in (0.8–0.9 mm)	H: 15½ in (394 mm) W: 12 in (305 mm) D: 20½ in (520 mm)	45 lb (20.4 kg)

NEW!

Millermatic® 211 Auto-Set™ with MVP™

See Literature No. DC/12.54

Available
1st Quarter



Welding Capability
Not to scale.

Mild Steel

Min. — 24 ga (0.8 mm)

Max. — 3/8 in (9.5 mm)

Aluminum

w/Spoolmate 100
Series Spool Gun

Min. — 18 ga (1.2 mm)

Max. — 1/4 in (6.4 mm)

Welds thickest material in its class—up to 3/8 in (9.5 mm) in a single pass!

Auto-Set™—the exclusive Auto-Set feature makes set up quick and easy (for more info see pg 24).

Infinite voltage adjustment provides broader operating range with finer control than a tap machine.



Multi-Voltage Plug (MVP™)—Miller's exclusive MVP allows connection to 115 or 230 V receptacles without tools.

Smooth-Start™ patent-pending technology provides smooth, spatter-free starts.

“Tip Saver” shuts down output if tip is shorted to work. Extends contact tip life and protects internal components from damage.

Recommended aluminum solution:
Spoolmate 100 Series #300 371.

Light Industrial ● **CV DC 1**
Phase

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 6 ft (1.8 m) power cord and MVP™ adapter plugs for 115 and 230 V
- 10 ft (3 m) M-10 MIG gun and cable assembly #195 605
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid valve
- Smith® regulator and gas hose
- Dual groove quick-change drive rolls for .024 in (0.6 mm) or .030/.035 in (0.8/0.9 mm) wire
- Extra contact tips, Hobart® spool of solid wire, information/settings chart, set-up/operation CD and material thickness gauge (#229 895)

Most Popular Accessories

- Spoolmate™ 100 Series #300 371 (pg 41)
- Running Gear/Cylinder Rack (pg 75)
Small #300 425
Regular #770 187
- Protective Cover #195 149 (pg 78)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number (#907 422) 115/230 V (#907 422-01-1) 115/230 V with Small Running Gear/Cyl. Rack	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz		Wire Feed Speed	Wire Type and Diameter	Dimensions*	Net Weight*		
	115 VAC	30–140	90 A at 20 V at 20% Duty Cycle	115 V	230 V					KVA	KW
	230 VAC	30–210	150 A at 23.5 V at 30% Duty Cycle	—	24.3	5.5	4.8	60–460 IPM (1.5–11.7 m/min)	Solid Steel: .023–.035 in (0.6–0.9 mm) Stainless: .023–.035 in (0.6–0.9 mm) Flux Cored: .030–.045 in (0.8–1.1 mm)	H: 17½ in (444 mm) W: 17½ in (273 mm) D: 15¾ in (400 mm)	74 lb (33.6 kg)

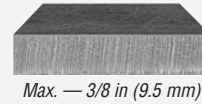
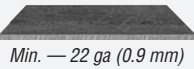
Millermatic® DVI2™

See Literature
No. DC/12.52

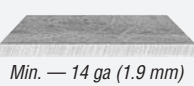


Welding Capability
Not to scale.

Mild Steel



Aluminum
w/Spoolmate 3035
Spool Gun



6-tap voltage adjustment provides superior performance throughout its operating range.



Multi-Voltage Plug (MVP™)—Miller's exclusive MVP allows connection to 115 or 230 V receptacles without tools. Welds material from 22 gauge up to 3/8 in thick on 230 V and up to 3/16 in thick on 115 V.

Heavy duty aluminum drive system (for more info see pg 24).

Angled industrial, aluminum drive system positions the MIG gun in a natural position to feeder wire. Reduces kinking gun liners that cause wire feed issues.

Optional gas valve/trigger receptacle kit allows easy Spoolmate 3035 spool gun hookup for aluminum welding.

EZ-Access™ consumable compartment and parameter chart provides convenient flip-down compartment for fast access to consumables and parameter chart.

Recommended aluminum solution:
Spoolmate 3035
#195 016.



Light Industrial ● CV DC 1 Phase

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 10 ft (3 m) power cord and MVP™ adapter plugs for 115 and 230 V
- 10 ft (3 m) M-10 MIG gun
- 10 ft (3 m) work cable with clamp
- Smith® argon mix regulator/flow gauge w/hose
- Factory-installed running gear/cylinder rack
- .030/.035 in reversible dual groove drive rolls
- Extra contact tips
- Set-up and operation CD

Most Popular Accessories

- Spoolmate™ 3035 #195 016 (pg 41) and required Gas Valve/Trigger Receptacle Kit (#300 338)
- Dual EZ Cyl. Rack #300 337 (pg 75)
- Elevated Gun and Cable Rack #300 335 (pg 75)
- Protective Cover/Helmet Bag #195 142 (pg 78)
- MVP™ Plugs (pg 80)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number (#907 323) 115/230 VAC (#951 067) 115/230 VAC with Spoolmate 3035, Dual Cylinder Rack, Elevated Cable Rack, Regulator, Gas Hose and Gas Valve/Trigger Receptacle Kit	Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz		Wire Feed Speed 50–600 IPM (1.3–15.2 m/min)	Wire Type and Diameter Solid Steel: .023–.035 in (0.6–0.9 mm) Stainless: .023–.035 in (0.6–0.9 mm) Flux Cored: .030–.045 in (0.8–1.2 mm)	Dimensions H: 30 in (762 mm) W: 19 in (483 mm) D: 40 in (1016 mm)	Net Weight 169 lb (77 kg)
	115 VAC	30–135	90 A at 18 VDC, 20% Duty Cycle	115 V	230 V				
	230 VAC	30–175	150 A at 23 VDC, 40% Duty Cycle	—	25	5.74	4.93		

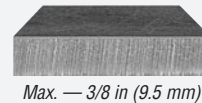
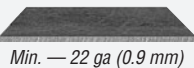
Millermatic® 212 Auto-Set™

See Literature
No. DC/12.46

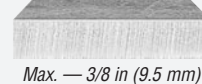
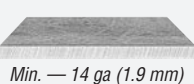


Welding Capability
Not to scale.

Mild Steel



Aluminum
w/Spoolmatic 15A
or 30A Spool Gun



NEW!
Available
1st Quarter

Auto-Set™—the exclusive Auto-Set feature makes set up quick and easy (for more info see pg 24).

Infinite voltage adjustment—when used in manual mode provides broader operating range with finer control than a tap machine.

Compatible with Spoolmatic® 15A/30A spool gun with wire feed speed control on the gun. Saves time by reducing trips back to the machine.

Gun-On-Demand™—simply pull the trigger for either gun and you're ready to weld. No wasted time installing modules and using gas valve kits.

Heavy duty aluminum drive system (for more info see pg 24).

Recommended aluminum solution:
Spoolmatic 15A or 30A
#195 156 or #130 831.



Industrial ● CV DC 1 Phase

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 15 ft (4.5 m), 250 amp M-25 gun
- 10 ft (3 m) work cable with clamp
- Smith® argon mix regulator/flow gauge w/hose
- 7 ft (2.1 m) power cord and plug
- Factory-installed running gear/cylinder rack
- .030/.035 in reversible dual groove drive rolls
- Extra contact tips, set-up/operation CD and material thickness gauge (#229 895)

Most Popular Accessories

- Spoolmatic® 15A/30A Spool Guns for aluminum welding #195 156/#130 831 (pg 42)
- Dual EZ Cyl. Rack #300 337 (pg 75)
- Elevated Gun and Cable Rack #300 335 (pg 75)
- Protective Cover/Helmet Bag #195 142 (pg 78)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

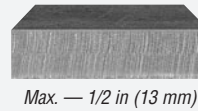
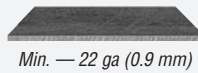
Stock Number (#907 405) 200(208)/230 V (#951 146) 200(208)/230 V with Spoolmatic 15A, Dual Cylinder Rack, Regulator and Gas Hose	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz		Wire Feed Speed 50–700 IPM (1.3–17.8 m/min)	Wire Type and Diameter Solid Steel: .023–.035 in (0.6–0.9 mm) Stainless: .023–.035 in (0.6–0.9 mm) Flux Cored: .030–.045 in (0.8–1.2 mm)	Dimensions H: 30 in (762 mm) W: 19 in (483 mm) D: 40 in (1016 mm)	Net Weight 178 lb (81 kg)
	30–210	160 A at 24.5 VDC, 60% Duty Cycle	200 V	230 V				
			31	27	6.5	5.5		

Millermatic® 252

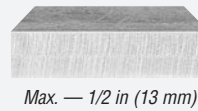
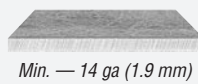
See Literature No. DC/12.49

Welding Capability
Not to scale.

Mild Steel



Aluminum
w/Spoolmatic 15A
or 30A Spool Gun



Recommended aluminum solution:
Spoolmatic 15A or 30A
#195 156 or #130 831.

Infinite voltage control with digital meters

have self-calibrating meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow, burnback, spot and delay (Stitch) timers. Independent timers for MIG and spool gun.

Superior aluminum MIG welding with direct connection of optional XR push-pull guns and Spoolmatic 15A/30A spool guns. No extra module to buy or install.

Auto-Gun Detect™ automatically adjusts voltage, wire speed and timers for faster, easier switching between MIG, push-pull and spool guns.

Heavy duty aluminum drive system (for more info see pg 24).

Fan-On-Demand™ cooling system only operates when needed reducing power consumption.

15 ft (4.5 m) M-25 MIG gun features durable one-piece handle, unicable outer jacket, trigger rated for one million cycles, and steel spring coils protecting cable ends.

Industrial ● **CV DC 1**
Phase

Processes

• MIG (GMAW) • Flux Cored (FCAW)

Comes Complete With

- 15 ft (4.5 m), 250 amp M-25 MIG gun
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid
- Smith® argon mix regulator/flow gauge with hose
- 10 ft (3 m) industrial power cord and plug (plug on 200/230 V model only)
- Factory-installed running gear/cylinder rack
- .030/.035 in reversible dual groove drive rolls
- Extra contact tips
- Set-up and operation CD

Most Popular Accessories

- XR™ A Push-Pull Guns (see below)
- Spoolmatic® 15A Spool Gun for aluminum welding #195 156 (pg 42)
- Spoolmatic® 30A Spool Gun for aluminum welding #130 831 (pg 42)
- Dual EZ-Change™ Low Cylinder Rack #300 337 (pg 75)
- Elevated Gun and Cable Rack #300 335 (pg 75)
- Protective Cover/Helmet Bag #195 142 (pg 78)
- MIG Consumable Kit (pg 79)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz	Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight
(#907 321) 200(208)/230 V (#907 322) 230/460/575 V (#951 066*) 200(208)/230 V w/Spoolmatic 30A (#951 065*) 230/460/575 V w/Spoolmatic 30A	30–300	200 A at 28 VDC, 60% Duty Cycle 250 A at 28 VDC, 40% Duty Cycle	48 42 21 17 10 7.7 (at 60% Duty Cycle)	50–700 IPM (1.3–17.8 m/min)	Solid Steel: .023–.045 in (0.6–1.2 mm) Stainless: .023–.045 in (0.6–1.2 mm) Flux Cored: .030–.045 in (0.8–1.2 mm)	H: 30 in (762 mm) W: 19 in (483 mm) D: 40 in (1016 mm)	207 lb (94 kg)

*Comes complete with Dual Cylinder Rack, Regulator and Gas Hose.

Optional XR™-A Push-Pull Guns

Millermatic 252 now comes standard with direct connection for Miller XR push-pull guns.

Able to utilize 12 in rolls of aluminum inside the Millermatic 252 for extended aluminum welding time and reduced labor time from changing 1 lb rolls of aluminum wire.



Order Push-Pull Gun and Aluminum U-Groove Drive Roll and Accessory Kit separately. All push-pull guns are compatible with Millermatic 252 and 350/350P.

Gun	XR-Aluma-Pro™ A	XR™-A Pistol
15 ft (4.6 m) Cable	#300 000	#198 127
25 ft (7.6 m) Cable	#300 001	—
30 ft (9 m) Cable	—	#198 128
35 ft (10.7 m) Cable	#300 264	—

Aluminum U-Groove Drive Roll and Accessory Kit	XR-Aluma-Pro™ A	XR™-A Pistol
.035 in (0.9 mm)	#195 311	#195 201
.047 in (1.2 mm)	#195 313	#195 202

Millermatic® 350 & 350P

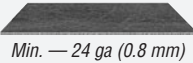
See Literature
No. DC/12.51

Industrial CV DC 3 1
Phase Phase

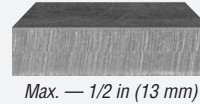


Welding Capability
Not to scale.

Mild Steel

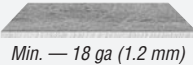


Min. — 24 ga (0.8 mm)

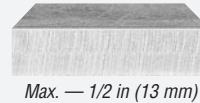


Max. — 1/2 in (13 mm)

Aluminum
w/Aluma-Pro
Push-Pull Gun



Min. — 18 ga (1.2 mm)



Max. — 1/2 in (13 mm)

Aluminum Pulse Hot Start™ (350P model) automatically provides more arc power to eliminate a “cold start” that is inherent with aluminum starts.

Built-in Pulsed MIG programs (350P model). All programmed information is restored after each power up — aluminum/steel/stainless steel/metal core.

Infinite voltage control with digital meters have self-calibrating meters that permit presetting of voltage and wire feed speed. Ensures precise parameters and accuracy.

Integrated digital timers come complete with presettable preflow/postflow and spot timers. Independent timers for MIG and push-pull guns.

Superior aluminum MIG welding with direct connection of optional XR push-pull guns and Spoolmatic 15A/30A spool guns. No extra module to buy or install.

Auto-Gun Detect™ automatically adjusts voltage, wire speed and timers for faster, easier switching between MIG, push-pull and spool guns.

Heavy duty aluminum drive system (for more info see pg 24).

Fan-On-Demand™ cooling system only operates when needed reducing power consumption and keeping internal components cleaner.

Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- Pulsed MIG (GMAW-P) w/350P

Comes Complete With

- 15 ft (4.5 m) Bernard® Q300 MIG gun with Centerfire™ consumables
- 10 ft (3 m) work cable with clamp
- Factory-installed gas solenoid
- Smith® argon mix regulator/flow gauge with hose
- 10 ft (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed, low-mounted running gear/cylinder rack
- .035/.045 in reversible V-groove drive rolls (order U-groove drive rolls for aluminum welding)
- Extra contact tips
- Set-up and operation CD

Most Popular Accessories

- XR™-A Push-Pull Guns (pg 28)
- Spoolmatic® 15A Spool Gun for aluminum welding #195 156 (pg 42)
- Spoolmatic® 30A Spool Gun for aluminum welding #130 831 (pg 42)
- Dual Cylinder Rack #195 299 (pg 75)
- Protective Cover/Helmet Bag #195 142 (pg 78)

See your Miller distributor or MillerWelds.com for other popular Miller options and accessories.

Recommended aluminum solution:
Aluma-Pro push-pull gun (see page 28).

Model/Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz					Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight	
			200 V	230 V	460 V	575 V	KVA					KW
Millermatic 350 (#907 299) 200/230/460 V (#907 167) 460/575 V	25–400	Three-Phase 300 A at 32 VDC, 60% Duty Cycle	34	30	15	12	11.6	11.5	MIG Gun 50–700 IPM (1.3–17.8 m/min) Optional Spool Gun/ Push-Pull Gun 50–800 IPM (1.3–20 m/min)	Solid Steel: .023–.045 in (0.6–1.2 mm) Stainless: .030–.045 in (0.8–1.2 mm) Aluminum: .035–.047 in (0.9–1.2 mm) Metal-Core: .035–.052 in (0.9–1.3 mm) Flux Cored: .030–.045 in (0.8–1.2 mm)	H: 34 in (863 mm) W: 19 in (483 mm) D: 41 in (1041 mm)	181 lb (82 kg)
Millermatic 350P (#907 300) 200/230/460 V (#907 168) 460/575 V		Single-Phase 300 A at 32 VDC, 60% Duty Cycle	69	61	30	24	13.1	11.2				
Millermatic 350P/Aluma-Pro System (see below for contents) (#907 379) 200/230/460 V (#907 380) 460/575 V												

Optional Aluminum System

Millermatic 350P/XR-Aluma-Pro™-A Push-Pull Gun Aluminum System

#907 379 200/230/460 V
#907 380 460/575 V

The ideal aluminum welding package. Includes Millermatic 350P, 25 ft XR-Aluma-Pro™ push-pull gun, .035 and 3/64 in FasTip™ contact tips, and .035 & 3/64 in reversible U-groove drive rolls. (MIG gun not included.)

For other push-pull guns, see pg 28.



Able to utilize 12 in rolls of aluminum for extended aluminum welding time and reduced labor time from changing 1 lb rolls of aluminum wire.



MIG Packages for Demanding Industrial Applications

Each Product Offers Three Package Options That Will Help Fit Your Specific Welding Needs



Power Source Welding Performance

		300 Amp				450 Amp			650 Amp		
		CP-302 (Pg 31)	Delta-Fab™ (Pg 31)	Deltaweld® 302 (Pg 32)	Invision™ 350 MPa (Pg 33)	Access® 300 (Pg 34)	Deltaweld® 452 (Pg 32)	Invision™ 456P/MP (Pg 33)	Access® 450 (Pg 34)	Deltaweld® 652 (Pg 32)	Access® 675 (Pg 34)
Material	Mild Steel	●	●	●	●	●	●	●	●	●	●
	Stainless Steel	○	○	○	●	●	○	●	●	○	●
	Aluminum		○	○	●	●	○	●	●	○	●
Material Thickness	Gauge (.020 – .125)	●	●	●	●	●	○	●	●	○	●
	Sheet (.125 – .375)	●	●	●	●	●	●	●	●	●	●
	Plate (.375 – 1 in)	○	●	○	○	○	●	●	●	●	●
	Plate (1+ in)						○	○	●	●	●
Wire Size	.030	●	●	●	●		○	●			
	.035	●	●	●	●	●	●	●	●	●	●
	.045	○	●	○	○	○	●	●	●	●	●
	.052	○	●	○	○	○	●	●	●	●	●
	1/16	○	○	○	○		●	●	●	●	●
	5/64						●	●	●	●	●
	3/32						○	○	○	●	●
Process	Short Circuit	★★★★	★★	★★	★★★★	★★★★	★★	★★★★	★★★★	★★	★★★★
	Pulsed Spray				★★★★	★★★★		★	★★★★		★★★★
	Accu-Pulse®					★★★★			★★★★		★★★★
	RMD™					Optional ★★★★★			Optional ★★★★★		Optional ★★★★★
	CAC-A				1/4"		1/4"	5/16"	1/4"	3/8"	3/8"

ICON KEY

CAPABILITY: ● Designed for ○ Capable of **PROCESS QUALITY:** ★ Good ★★ Better ★★★ Best ★★★★★ Optimized
Note: All machines listed are designed for MIG spray transfer and Flux Cored welding.

CP-302

See Literature No. DC/13.0

Delivers dependable performance and productivity in more semiautomatic applications. Combined with 22A wire feeder it makes this a “Good!” light to medium industrial solution.



Machine only Stationary Package



Three options available — see Web site or Literature No. DC/13.0 for package details.

MIGRunner Package

*Dimensions and weight are for power source only — includes lift eye and strain relief.

Industrial ● CV DC 3 Phase

Processes

- MIG (GMAW)
- Flux Cored (FCAW)

Most Popular Accessories

- 22A and 24A Wire Feeders (pg 44)
- 70 Series Wire Feeders (pg 46)
- Standard Running Gear #042 886 (pg 75)
- Standard Cylinder Rack #042 887 (pg 75)



- Industrial MIG 4/0 Kit #300 390 (pg 78)
- Bernard® Q-Gun™

When purchasing components separately please see your Miller distributor or visit MillerWelds.com for other popular Miller options and accessories.

Stock Number	Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz					Open-Circuit Voltage	Dimensions*	Net Weight*	
			200 V	230 V	460 V	575 V	KVA				KW
#903 786) 200/230/460 V, Machine only #903 521) 575 V, Machine only #951 082) 200/230/460 V, Stationary Pkg #951 110) 200/230/460 V, MIGRunner Pkg	14–44 V	300 A at 32 V, 100% Duty Cycle	38	33	16.5	13	13.1	12.3	14–44	H: 30 in (762 mm) W: 23 in (585 mm) D: 30½ in (775 mm)	332 lb (151 kg)

Delta-Fab™ System

See Literature No. DC/15

375 amps, excellent arc performance, and a 24A wire feeder with remote voltage control make this a “Better!” system solution for light and medium industrial applications.



Power Source/Feeder/Gun Stationary Package



Three options available — see Web site or Literature No. DC/15 for package details.

MIGRunner Package

*Dimensions and weight are for power source only — includes lift eye and strain relief.

Industrial ● CV DC 3 Phase

Processes

- MIG (GMAW)
- Flux Cored (FCAW)

Most Popular Accessories

- Standard Running Gear #042 886 (pg 75)
- Standard Cylinder Rack #042 887 (pg 75)
- Extension Cords (pg 77)



- Industrial MIG 4/0 Kit #300 390 (pg 78)
- Bernard® Q-Gun™

When purchasing components separately please see your Miller distributor or visit MillerWelds.com for other popular Miller options and accessories.

Model/Stock Number	Voltage Range	Rated Output	Amps Input at Rated Load Output, 60 Hz, 3-Phase					Dimensions*	Net Weight*
			230 V	460 V	575 V	KVA	KW		
Delta-Fab System (#951 022) 230/460/575 V, Pwr Source, Feeder and Gun Delta-Fab System (#951 083) 230/460/575 V, Stationary Pkg Delta-Fab System (#951 111) 230/460/575 V, MIGRunner Pkg	10–45	375 A at 35 VDC, 100% Duty Cycle	69	34.5	27.5	27.5	17.5	H: 30 in (762 mm) W: 23 in (585 mm) D: 30½ in (775 mm)	374 lb (180 kg)

Wire Feeder	Input Power	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
24A (Includes .035/.045 drive rolls)	24 VAC, 7 A, 50/60 Hz	75–750 IPM (1.9–16.5 m/min)	.023–3/32 in (0.6–2.4 mm)	60 lb (27 kg) coil	H: 11 in (279 mm) W: 10¾ in (273 mm) D: 23½ in (597 mm)	40 lb (18 kg)

Deltaweld® Series

See Literature No. DC/16.2

Rock solid reliability, exceptional value and power efficient operation make this the “Better!” MIG solution for the most demanding industrial manufacturing applications. Combined with the 70 Series wire feeder this system is the workhorse of the industrial market.



Deltaweld (see stock numbers below) Purchase components separately. See list at right for most popular accessories.

Deltaweld models are available in 300, 450 and 650 amps.

Line voltage compensation keeps welding parameters constant even when input voltages change ±10%. Eliminates need to change welding parameters throughout the day.

Material specific output studs provide the flexibility to produce the optimal arc characteristics for aluminum, stainless steel and all other materials.

Unique **Fan-On-Demand™** cooling system operates only when needed. Reduces excess noise and contaminants drawn into the machine.

Thermal overload protection automatically shuts down the system to prevent high repair costs.

Remote control capability allows operators fine tuning capability at an extended distance.

15 amp, 115 VAC duplex receptacle for operating auxiliary tools.

Digital meters for presetting or monitoring welding voltage or amperage for more precise control.

Power efficient for exceptional value and return on your investment.



Deltaweld Stationary Package (see stock numbers below) Stationary display without running gear/cylinder rack.

Comes Complete With:

- Deltaweld power source
- S-74D wire feeder with drive rolls
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit (see listing at right for kit contents)



Deltaweld MIGRunner™ Package (see stock numbers below) MIGRunner system with factory-installed running gear/cylinder rack.

Comes Complete With:

- Deltaweld power source
- S-74D wire feeder with drive rolls
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit (see listing at right for kit contents)
- Factory-installed running gear/cylinder rack

Industrial ● 302 model
Hvy Industrial ● 452/652 models



Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)
(452: 1/4 in carbons)
(652: 3/8 in carbons)

Most Popular Accessories

- 70 Series Wire Feeders (pg 46)
- Standard Running Gear #042 886 (pg 75)
- Standard Cylinder Rack #042 887 (pg 75)
- Extension Cords (pg 77)



Industrial MIG 4/0 Kit #300 390 (pg 78)

- Includes Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.
- Remote On/Off Control #042 869 (pg 81)
- Air Filter Kit #042 939
- Bernard® Q-Gun™

When purchasing components separately please see your Miller distributor or visit MillerWelds.com for other popular Miller options and accessories.

*Dimensions and weight are for power source only—includes lift eye and strain relief.

Model	Stock Number	Voltage Range	Recommended Welding Range	Rated Output	Amps Input at Rated Output, 60 Hz						Max. Open-Circuit Voltage	Dimensions*	Net Weight*
					200 V	230 V	460 V	575 V	KVA	KW			
Deltaweld 302	(#903 376)	200-208/230/460 V, Machine only	15–32 V	300 A at 32 VDC, 100% Duty Cycle	48	42	21	17	16.9	12.9	42 VDC	H: 30 in (762 mm) W: 23 in (585 mm) D: 30½ in (775 mm)	323 lb (147 kg)
	(#903 392)	230/460/575 V, Machine only											
	(#951 084)	200-208/230/460 V, Stationary Pkg											
	(#951 127)	230/460/575 V, Stationary Pkg											
	(#951 107)	200-208/230/460 V, MIGRunner Pkg											
Deltaweld 452	(#903 377)	200-208/230/460 V, Machine only	15–38 V	450 A at 38 VDC, 100% Duty Cycle	72	63	32	25	25.1	21.1	48 VDC	H: 30 in (762 mm) W: 23 in (585 mm) D: 38 in (966 mm)	384 lb (174 kg)
	(#903 394)	230/460/575 V, Machine only											
	(#951 085)	200-208/230/460 V, Stationary Pkg											
	(#951 128)	230/460/575 V, Stationary Pkg											
	(#951 108)	200-208/230/460 V, MIGRunner Pkg											
Deltaweld 652	(#903 396)	230/460/575 V, Machine only	15–44 V	650 A at 44 VDC, 100% Duty Cycle	—	96	48	38	38.2	34.2	54 VDC	H: 30 in (762 mm) W: 23 in (585 mm) D: 38 in (966 mm)	472 lb (214 kg)
	(#951 086)	230/460/575 V, Stationary Pkg											
	(#951 109)	230/460/575 V, MIGRunner Pkg											

Invision™ Series

350 MPa — See Literature No. DC/23.5
456MP — See Literature No. DC/23
456P — See Literature No. DC/20

Inverter design with variable inductance control provides the “Best!” industrial MIG welding performance for manufacturing applications. The Invision 350 MPa synergic system simplifies and improves Pulsed MIG welding capabilities.

Variable electronic inductance helps to minimize spatter and optimize weld bead profile.

Dual digital meters for quick and easy viewing.

14-pin select remote control allows “plug and play” convenience. Makes set-up time quicker.

Fan-On-Demand™ improves power efficiency and noise reduction.

Wind Tunnel Technology™ protects electrical components and PC boards from contamination, significantly improving reliability.

Invision (see stock numbers below) Purchase components separately. See list at right for most popular accessories.



Invision 456MP shown.



Invision 456MP Stationary Package shown.

The MP models add the following:

- **Built-in Pulsed MIG capabilities** eliminates pendants and cables that could potentially get damaged or lost.
- **Microprocessor-based technology** allows process parameter storage to be retained between power down, power up, and also between program changes.

The Invision 350 MPa model adds the following:

- **AUTCLINE™** Miller's patented technology allows for **any** input voltage hookup (208–575 V) with no manual linking.
- **Built-in Pulsed MIG using advanced arc control** offers a robust and stable pulse arc even at short arc lengths.
- **Simple user interface** allows set-up as easy as 1-2-3.



Invision 350 MPa MIGRunner Package shown.

Invision Stationary Package (see stock numbers below) Stationary display without running gear/cylinder rack.

Comes Complete With:

- Invision power source
- S-74 MPa wire feeder (S-74D with 456 pkgs) with drive rolls
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit with Dinse Connector with 350 MPa pkg (see listing at right for kit contents) **or** Industrial MIG 4/0 Kit with 456 pkgs (see listing on page 32 for kit contents)

Invision MIGRunner™ Package (see stock numbers below) MIGRunner system with factory-installed running gear/cylinder rack.

Comes Complete With:

- Invision power source
- S-74 MPa wire feeder (S-74D with 456 pkgs) with drive rolls
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit with Dinse Connector with 350 MPa pkg (see listing at right for kit contents) **or** Industrial MIG 4/0 Kit with 456 pkgs (see listing on page 32 for kit contents)
- Factory-installed running gear/cylinder rack (MIGRunner Cart with 350 MPa pkg **or** Running Gear Cylinder Rack with 456 pkgs)

*Additional models are available, see our Web site or literature sheets.

**Dimensions and weight are for power source only.

Industrial ● Invision 350 MPa
Heavy Industrial ● Invision 456

CV DC 3 Phase Invision 456P is CV only.

Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- Pulsed MIG (GMAW-P) with MP/MPa models (456P requires optional control)
- Stick (SMAW) with 456MP model
- Air Carbon Arc Cutting and Gouging (CAC-A) (350 MPa: 1/4 in carbons) (456 models: 5/16 in carbons)

Push-Pull Aluminum Package

#951 125 — Invision 350 MPa, XR™-Control and 25 ft (7.6 m) air-cooled XR-Aluma-Pro™ Gun

Most Popular Accessories

- XR™-Control (pg 43)
- 70 Series Wire Feeders (pg 46)
- MIGRunner™ Cart (Invision 350 MPa only) #195 445 (pg 74)
- Running Gear Cylinder Rack (Invision 456 models only) #300 408 (pg 74)



- **Industrial MIG 4/0 Kit with Dinse Connector #300 405 (pg 78)** Includes Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with Dinse connector on one end and a lug on the other, and 15 ft (4.6 m) work cable with Dinse connector on one end and 600-amp C-clamp.



- **S-74 MPa Wire Feeder #300 411** Designed **exclusively** for the Invision 350 MPa for Synergic Pulsed MIG benefits. Has wire speed of 50–780 IPM.

When purchasing components separately please see your Miller distributor or visit MillerWelds.com for other popular Miller options and accessories.

Model*	Stock Number	Amperage/ Voltage Range	Rated Output	RMS Amps Input at Rated Load Output, 60 Hz, at NEMA Load Voltages and Class I Rating					Max. Open- Circuit Voltage	Dimensions**	Net Weight**
				230 V	460 V	575 V	KVA	KW			
Invision 350 MPa	(#907 397) 208–575 V, Machine only (#951 113) 208–575 V, Stationary Pkg (#907 398) 208–575 V, MIGRunner Pkg	CC Mode: 5–425 A CV Mode: 10–38 V	350 A at 34 VDC, 60% Duty Cycle	36.1	17.8	14.1	14.2	13.6	75 VDC	H: 17 in (432 mm) W: 12½ in (318 mm) D: 24 in (610 mm)	80 lb (36.3 kg)
Invision 456MP	(#903 725) 230/460 V, Machine only (#907 056) 575 V, Machine only (#951 088) 230/460 V, Stationary Pkg (#951 122) 230/460 V, MIGRunner Pkg	CC Mode: 5–600 A Stick CV Mode: 10–38 V	450 A at 38 VDC, 100% Duty Cycle	50.8	27.8	24.4	21.2	19.2	95 VDC	H: 17 in (432 mm) W: 14½ in (368 mm) D: 26 in (660 mm)	118 lb (53.5 kg)
Invision 456P	(#903 505) 230/460 V, Machine only (#903 546) 575 V, Machine only (#951 095) 230/460 V, Stationary Pkg (#951 121) 230/460 V, MIGRunner Pkg	CV Mode: 10–38 V									

Access® Systems

See Literature No. AU/8.0

Optimize your industrial MIG welding system with digital control capability and exceptional MultiMIG® performance. A dedicated, menu-driven wire feeder provides a true synergic solution.



Access (see stock numbers below)

Purchase components separately. See list at right for most popular accessories or use our online configurator at MillerWelds.com/AMS.



Miller's patented technology allows for **any** input voltage hookup (190–630 V) with no manual linking. Assures rock-solid, consistent output on fluctuating primary lines.

9-pin Palm™ handheld (PDA) RS-232 serial communication port provides Access to data transfer and optional program downloads from Web at MillerWelds.com/AMS/access.

Access four-drive-roll wire drive feeder is combined with operator interface leaving no controls back at the power source.

MIG welding programs include patented **Accu-Pulse®**, **Accu-Curve™**, standard or adaptive pulse, conventional MIG and metal core programs.

Accu-Pulse® MIG process delivers precise control of the arc even over tack welds and in tight corners.

SureStart® technology provides consistent arc starts by precisely controlling power levels for specific wire and gas combinations.



Access Stationary Package (only available with 300 and 450 models, see stock numbers below)

Stationary display without running gear/cylinder rack.

Comes Complete With:

- Access power source
- Access wire feeder with drive rolls
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit (see listing at right for kit contents)



Access MIGRunner™ Package (only available with 300 and 450 models, see stock numbers below)

MIGRunner system with factory-installed running gear/cylinder rack.

Comes Complete With:

- Access power source
- Access wire feeder with drive rolls
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit (see listing at right for kit contents)
- Factory-installed running gear/cylinder rack

- Industrial** ● 300 model
- Hvy Industrial** ● 450/675 models



Processes

Multi-MIG®

- Accu-Pulse™ MIG (GMAW-P)
- Accu-Curve™ MIG (GMAW-P)
- Pulsed MIG (GMAW-P)
- Metal Core
- MIG (GMAW)
- RMD™ Regulated Metal Deposition (GMAW-SCT) (optional)
- Carbon Arc Gouging (CAC-A) can also be activated.

Most Popular Access-ories

- RMD™ (Regulated Metal Deposition) #195 252 (pg 37)
- Palm™ Convenience Package #195 517 (pg 37)
- Access® File Management Software #195 249 (pg 37)
- WaveWriter™ File Management Software #195 250 (pg 37)
- Feeder Cart #142 382 (pg 74)
- Running Gear Cylinder Rack (Access 300 and 450 only) #300 408 (pg 74)



Industrial MIG 4/0 Kit #300 390 (pg 78)

Includes Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.

- **NEW!** Aluminum Gun Kits — for pushing aluminum wire (pg 79)
 - .035, 10 ft (3 m) #300 541
 - .047, 12 ft (3.7 m) #300 542
 - 1/16, 12 ft (3.7 m) #300 543
- Kits include .035, .047 or 1/16 in drive rolls and 10 or 12 ft Bernard® Q-Gun™

When purchasing components separately please see your Miller distributor or visit MillerWelds.com for other popular Miller options and accessories.

*Additional models are available, see our Web site or literature sheets.

**Dimensions and weight are for power source only.

Model*	Stock Number	Amperage/Voltage Ranges	Three-Phase Rated Output	Amps Input at Rated Output, 50/60 Hz 208 V 230 V 400 V 460 V 575 V KVA KW	Max. Open-Circuit Voltage	Dimensions**	Net Weight**
Access 300	(#907 150) Machine only (#951 089) Stationary Pkg (#951 101) MIGRunner Pkg	5–400 A 10–44 V	300 A at 32 VDC, 60% Duty Cycle	33 29.7 16.9 14.6 11.6 11.7 11.2	80 VDC	300 H: 23 in (584 mm) 450 H: 31 in (787 mm) 675 H: 39 in (991 mm) W: 17 in (432 mm) D: 22-1/2 in (572 mm)	116 lb (52.6 kg)
Access 450	(#907 152) Machine only (#951 090) Stationary Pkg (#951 100) MIGRunner Pkg	5–600 A 10–44 V	450 A at 44 VDC, 100% Duty Cycle	— 60 33.7 28.8 22.8 22.2 23.1	80 VDC		163 lb (73.9 kg)
Access 675	(#907 154) Machine only	5–900 A 10–44 V	675 A at 44 VDC, 100% Duty Cycle	— 89.7 — 43.7 34.8 35.7 34.4	80 VDC		208 lb (94.3 kg)



Wirefeeding Options

Access® Feeders

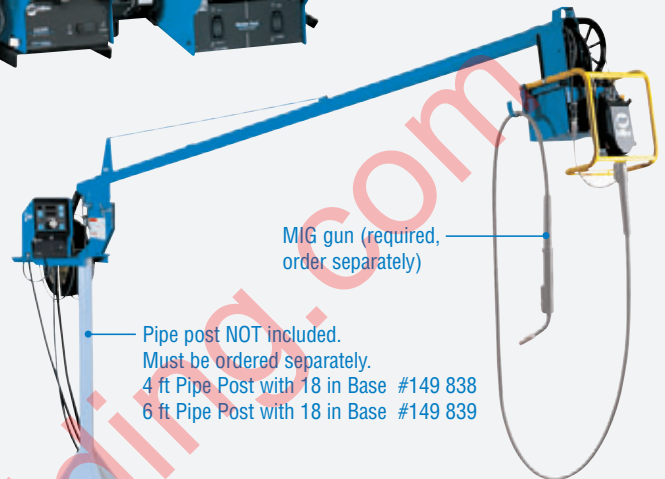
Single-Wire Model	#195 182	
Dual-Wire Model	#195 325	
DeviceNet Interconnecting Feeder Control Cable (One required per machine)	#195 240	5 ft (1.5 m)
	#195 241	10 ft (3 m)
	#195 242	25 ft (7.6 m)
	#195 243	50 ft (15.2 m)



Access® ROI Swingarc™ Boom-Mounted Feeders

Single-Wire Models	#300 363	8 ft (2.4 m)
	#195 484	12 ft (3.7 m)
	#195 346	16 ft (4.9 m)
Dual-Wire Models	#300 364	8 ft (2.4 m)
	#195 434	12 ft (3.7 m)
	#195 435	16 ft (4.9 m)

Swingarc boom-mounted semiautomatic wire feeders bring an extra dimension of flexibility and efficiency to high-production MIG welding stations. You get an effective solution that maximizes output, especially when dealing with large weldments and hard-to-reach places.



Go to the online Access System Configurator at MillerWelds.com/AMS

Access® ROI (Remote Operator Interface)



Single ROI #195 238
Dual ROI #195 433
ROI includes the operator interface and wire motor control packaged into a separate sheet metal enclosure allowing the power source, wire drive motor assembly and operator interface (ROI) to be located in three separate places. Does NOT include AA-40GB Wire Drive Motor Assembly, Motor Control Cable or DeviceNet Interconnecting Feeder Control Cable. These must be ordered separately (see below). Ideal for retrofitting existing booms (Miller and competitive brands).



Auto ROI back panel showing connection for input and output signals.

Auto ROI #195 239
The Auto ROI is different from other ROI models in that it allows for control of simple automated equipment with two programmable contacts when used with semi-automatic Access **AND** E-Stop option. Used for fixed/hard automation applications. Includes 30 ft cable for wiring to other external devices.

Go to the online Access System Configurator at MillerWelds.com/AMS

Cables and Wire Feed Motors



Access Power Source

DeviceNet Interconnecting Feeder Control Cable

5 ft (1.5 m)	#195 240
10 ft (3 m)	#195 241
25 ft (7.6 m)	#195 242
50 ft (15.2 m)	#195 243



ROI (Remote Operator Interface)

Motor Control Cable

20 ft (6.1 m)	#300 097
30 ft (9 m)	#300 096
50 ft (15.2 m)	#300 098

(Two cables required for Dual ROI.)

Flexible Mounting Options

Boom Retrofit Applications



Feeder Base with Spool Support #195 369



Gun



AA-40GB Wire Drive Motor Assembly

Left-Hand Drive	#195 426
Right-Hand Drive	#195 515

(Two wire drive motor assemblies required for Dual ROI.)

Go to the online Access System Configurator at MillerWelds.com/AMS



Consult the factory for ALL Automation and Robotic applications at 1-920-954-3813.

Products shown in this section are more complex and may require Miller factory support at additional expense to assure the system and components needed are properly selected and installed.



Go to the online Access System Configurator at MillerWelds.com/AMS



Auto-Access® Systems

For robotic automation — seamless integration of digital control technology combines inverter welding power source and robotic interface.

See Literature No. AU/8.0

Features Auto-CAL...

A patented automatic calibration feature that uses the Auto-Access internal digital technology to allow simple, automatic scaling and synchronization to analog robot controllers. This assures consistent and repeatable results with minimal downtime when installing Auto-Access power sources into existing robot cells. It also saves time and additional hardware costs while minimizing complexity in new cells on most robot systems.



AA-40GB Motors (Motor control cables must be ordered separately.)

AA-40GB motor connections.

AA-40GB Wire Drive Motor Assembly with OCP (Over Current Protection) to protect against current surges. New design utilizes an improved sheet metal enclosure including printed circuit board. It features a threaded gas connection and a direct-panel-mounted, quarter-turn motor control cable connection that eliminates motion stress on the motor's power and tachometer feedback wires.

72-pin Harting connector for quick, easy connection to common analog robot controllers.



Miller's patented technology allows for **any** input voltage hookup (190–630 V) with no manual linking. Assures rock-solid, consistent output on fluctuating primary lines.

MIG welding programs include patented **Accu-Pulse**®, **Accu-Curve**™, **Accu-Speed**™, standard or adaptive pulse, conventional MIG and metal core programs.

Accu-Pulse® MIG process delivers precise control of the arc even over tack welds and in tight corners.

SureStart® technology provides consistent arc starts by precisely controlling power levels for specific wire and gas combinations.

Optional Access-able software:

RMD™ (Regulated Metal Deposition), and Palm™ OS®-Based Access® File Management and WaveWriter™ with Wave Shaping.

Processes

CV DC 3 Phase

Multi-MIG®

- Accu-Pulse® MIG (GMAW-P)
- Accu-Curve™ MIG (GMAW-P)
- Accu-Speed™ MIG (GMAW-P)
- Pulsed MIG (GMAW-P)
- Metal Core
- MIG (GMAW)
- RMD™ Regulated Metal Deposition (GMAW-SCT) (optional)

Required Wire Drive Motor Assembly/Motor Control Cable

- AA-40GB Wire Drive Motor (includes 50 ft volt-sense lead)
- Left-Hand Drive #195 426
- Right-Hand Drive #195 515 (Order required Motor Control Cable separately)
- Motor Control Cable
- 20 ft (6.1 m) #300 097
- 30 ft (9 m) #300 096
- 50 ft (15.2 m) #300 098

Most Popular Access-ories

- RMD™ (Regulated Metal Deposition) #195 252 (pg 37)
- Palm™ Convenience Package #195 517 (pg 37)
- Access® File Management Software #195 249 (pg 37)
- WaveWriter™ File Management Software #195 250 (pg 37)
- Coolant Flow Switch #195 461 (pg 74)
- Receptacle/Adapter Kits (One required per machine)
- ABB #194 793
- Fanuc #194 791
- Motoman #194 790
- Universal #195 002
- Panasonic #300 056
- Smart Adapter #300 012 — allows automatic to be configured to function as semi-automatic
- Fanuc/Motoman Motor Bracket #300 013

*Order Wire Drive Motor Assembly and required length Motor Control Cable separately.

Model	Stock Number*	Amperage/Voltage Ranges	Three-Phase Rated Output	Amps Input at Rated Output, 50/60 Hz				Max. Open-Circuit Voltage	Dimensions	Net Weight			
				208 V	230 V	400 V	460 V	575 V	KVA	KW			
Auto-Access 300	(#907 151) Base Power Source (#907 151-01-1) w/RMD Process Software	5–400 A 10–44 V	300 A at 32 VDC, 60% Duty Cycle	33	29.7	16.9	14.6	11.6	11.7	11.2	80 VDC	300 H: 23 in (584 mm) 450 H: 31 in (787 mm) 675 H: 39 in (991 mm) W: 17 in (432 mm) D: 22-1/2 in (572 mm)	116 lb (52.6 kg)
Auto-Access 450	(#907 153) Base Power Source (#907 153-01-1) w/RMD Process Software	5–600 A 10–44 V	450 A at 44 VDC, 100% Duty Cycle	—	60	33.7	28.8	22.8	22.2	23.1	80 VDC		163 lb (73.9 kg)
Auto-Access 675	(#907 155) Base Power Source	5–900 A 10–44 V	675 A at 44 VDC, 100% Duty Cycle	—	89.7	—	43.7	34.8	35.7	34.4	80 VDC		208 lb (94.3 kg)



Consult the factory for ALL Automation and Robotic applications at 1-920-954-3813.

Access® Multi-MIG® Welding Process Capabilities

Process	Standard Spray	Pulsed Spray	Accu-Pulse® Accu-Speed™ Accu-Curve™	Standard Short Circuit	RMD™ Regulated Metal Deposition (Optional)
Weld Puddle Control	Flat/Horizontal	All Position Performance		Thin Materials/Gap Filling	

Look for high-speed video clips of Accu-Pulse®, Accu-Curve™ and Accu-Speed™ online at MillerWelds.com/AMS/accxess.

Accu-Pulse®

STANDARD on all Access models — the patented Accu-Pulse process allows for precise control of the pulse arc. Accu-Pulse provides optimum molten puddle control and has power to increase wire feed speeds and deposition 20 to 25% in many applications. Two new Accu-Pulse variations, Accu-Curve and Accu-Speed, are now included **FREE** with every new Access® or Auto-Access® system.

Accu-Curve™

STANDARD on all Access models — Accu-Curve is a variation of the Accu-Pulse process. The transitions from peaks to background voltage are “curved”. The curved transitions provide a “softer” feel without sacrificing the tight arc lengths that allow for better puddle control that have become the hallmark of the Accu-Pulse process.

Note: Accu-Curve can be added to existing Access or Auto-Access systems for **FREE** by updating code online at MillerWelds.com/AMS/accxess. Requires Palm handheld to transfer code from PC to Access.

Accu-Speed™

STANDARD on all Access models — Accu-Speed is a variation of the Accu-Pulse process and was developed for the type of arcs needed in automated welding applications. Accu-Speed has a tighter driving arc that can be directed into the joint, yet still remains stable at the higher travel speeds used in automated welding. In general, Accu-Speed has lower average voltage and amperage when compared to Accu-Pulse.

Note: Accu-Speed can be added to existing Access or Auto-Access systems for **FREE** by updating code online at MillerWelds.com/AMS/accxess. Requires Palm handheld to transfer code from PC to Access.

RMD™ (Regulated Metal Deposition)

Field #195 252 (Field installation requires Palm handheld with data card slot.)

The patented RMD (Regulated Metal Deposition) process — a software-based **OPTION** for all Access models — is a precisely controlled short-circuit transfer. It is a method of detecting when the short is going to clear and then rapidly reacting to this data changing the current (amperage) levels. Features Proactive Dynamic Puddle Control.

Note: **FREE demonstration** is included with every new Access or Auto-Access. Requires Palm to activate. **FREE eight-hour trial** can also be downloaded from MillerWelds.com/AMS/accxess for existing Access or Auto-Access systems.

Palm™ OS®-Based Software Options



Palm™ Convenience Package #195 517

Includes a compatible Palm™ handheld loaded with Service Pak software and an Access connection cable.

Note: Palm model may vary and File Management and WaveWriter software are sold separately. See at right.

Access® File Management #195 249

Simply put, the new Miller Palm OS-based file management software turns a standard Palm handheld (PDA) into a data card and a remote pendant control for all Access systems. This is in addition to all other functions a Palm is typically used for. By using a Palm handheld in this manner, we have built a powerful intuitive interface on a common affordable, portable platform. This opens the door to functions and capabilities not previously available from anyone in the welding industry. See Access Literature Index No. AU/8.0 for more details.

Benefits of Accu-Pulse®

(Compared to conventional pulse)

- Shorter arc lengths possible
- Better puddle control
- More tolerant of contact tip to work variation
- Less audible noise
- No arc wandering in tight corners
- Narrow arc plasma column
- Allows weld to fill in at toes increasing travel speed and deposition
- More tolerant of poor fit up and gaps
- Ideal for seam tracking robot welding applications

Benefits of Accu-Curve™

- “Softer” arc feel than Accu-Pulse
- Maintains tight arc lengths
- Maintains better puddle control

Benefits of Accu-Speed™

- Up to 20% greater travel speed than Accu-Pulse
- Lower average voltage/amperage than Accu-Pulse
- Tight, driving arc
- Remains stable at higher travel speeds

Benefits of RMD

- Well suited to thin materials
- Can replace TIG process in some applications
- Gap filling
- Spatter reduction
- Provides less heat into work piece
- Excellent performance on stainless steel
- Can be combined with other Access®-related programs
- Minimize distortion
- Use larger diameter wire on thin materials

WaveWriter™ File Management with Wave Shaping #195 250

WaveWriter is our premium Palm software package for Access systems. For Palm handhelds (PDAs), it includes all of the Palm Access file management functions plus a simple, Pulsed MIG wave-shaping program for the most demanding Pulsed MIG applications. See Access Literature Index No. AU/8.0 for more details.



Wire Feeders

Whether you're a weekend warrior who wants to weld a little aluminum, a high-volume steel manufacturer that demands repeatability, or a fabricator/contractor obsessed with portability, Miller has the right wire feeder to optimize your MIG and Flux Cored welding performance. For detailed spec sheets, visit the Wire Feeders section on MillerWelds.com.

MillerWelds.com/WireFeeders



Product Guide

	Page	Class	MIG	MIG-P*	Flux Core**	Portable	Power Source Required	Wire Types			Wire Diameters	Special Features	Typical Applications		
								Hard	Flux Core Dual Shld	Flux Core Self Shld					
Constant-Speed	SuitCase® 8RC, SuitCase® 12RC	40	●	●	●	●	CV	●	●	●	●	8RC: .023–5/64 in (0.6–2.0 mm) 12RC: .023–5/64 in (0.6–2.0 mm)	Portable, self-enclosed case, remote control	Construction, field maintenance, site fabrication	
	22A	44	●	●	●	●	CV	●	●	●	●	.023–5/64 in (0.6–2.0 mm)	(2) Quick-change drive rolls	Manufacturing, fabrication	
	24A	44	●	●	●	●	CV	●	●	●	●	.023–3/32 in (0.6–2.4 mm)	(4) Quick-change drive rolls	Manufacturing, fabrication	
	R-115	44	●	●	●	●	CV	●	●	●	●	.023–5/64 in (0.6–2.0 mm)	115 V replacement feeder	In-shop replacement	
	70 Series (Singles and Duals)	46	●	●	●	●	CV	●	●	●	●	.023–1/8 in (0.6–3.2 mm) Low speed option recommended for 3/32–1/8 in wires	Four drive roll, adjustable weld control	Heavy and light manufacturing, fabrication	
	70 Series Swingarc™	45	●	●	●	●	CV	●	●	●	●	.023–5/64 in (0.6–2.0 mm)	8, 12 and 16 ft booms, four drive roll, adjustable weld control	Heavy and light manufacturing, fabrication	
Voltage-Sensing	SuitCase® X-TREME® 8VS	39	●	●	●	●	CC/CV	●	●	●	●	CV**	.023–1/16 in (0.6–1.6 mm)	Lightweight, portable, 8 in diameter spool capacity	Shipbuilding, construction, site fabrication
	SuitCase® X-TREME® 12VS	39	●	●	●	●	CC/CV	●	●	●	●	CV**	.023–5/64 in (0.6–2.0 mm)	Lightweight, portable, 12 in diameter spool capacity	Shipbuilding, construction, site fabrication
	S-32S	45	●	●	●	●	CC/CV	●	●	●	●	CV**	.023–5/64 in (0.6–2.0 mm)	Handles 60 lb coils of wire	Construction, field fabrication
	S-32SL	45	●	●	●	●	CC/CV	●	●	●	●	CV**	5/64–7/64 in (2.0–2.8 mm)	Handles 60 lb coils of wire	Construction, field fabrication
Aluminum	Spoolmate™ 100 Series	41	●	●	●	●	CV	●	●	●	●	●	.023–.035 in (0.6–0.9 mm)	Economical, 135 A	Light-duty aluminum fabrication
	Spoolmate™ 3035	41	●	●	●	●	CC/CV	●	●	●	●	●	.023–.035 in (0.6–0.9 mm)	Economical, 150 A	Light-duty aluminum fabrication
	Spoolmatic® 15A/30A	42	●	●	●	●	CC/CV	●	●	●	●	●	.023–1/16 in (0.6–1.6 mm)	Portable, 4 in spool, 15 and 30 ft	Aluminum fabrication
	XR™-Pistol 15A/30A	42	●	●	●	●	CC/CV	●	●	●	●	●	.030–1/16 in (0.8–1.6 mm)	Push-pull system	Heavy aluminum fabrication
	XR™-Pistol 15W/30W	42	●	●	●	●	CC/CV	●	●	●	●	●	.030–1/16 in (0.8–1.6 mm)	Push-pull system	Heavy aluminum fabrication
	XR-Aluma-Pro™ A	43	●	●	●	●	CC/CV	●	●	●	●	●	.030–1/16 in (0.8–1.6 mm)	High-amperage air-cooled gun	All aluminum fabrication needs
	XR-Aluma-Pro™ W	43	●	●	●	●	CC/CV	●	●	●	●	●	.030–1/16 in (0.8–1.6 mm)	High-amperage water-cooled gun	All aluminum fabrication needs
	XR™-Control System	43	●	●	●	●	CC/CV	●	●	●	●	●	.030–1/16 in (0.8–1.6 mm)	Push-pull system	Heavy aluminum fabrication

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process

*Feeders marked ● for MIG-P require optional Optima control and a recommended inverter.

**Certain self-shielded wires require CV output. Miller recommends a CV power source whenever possible. For more detailed information, see individual specification sheets.



SuitCase® X-TREME™ 8VS and 12VS

See Literature No. M/6.41

Taking portable welding to the extreme — available in two sizes, these portable feeders have every feature you will ever need.



SuitCase X-TREME 8VS

SuitCase X-TREME 12VS

Models include Bernard® Q300 MIG gun (8VS/12VS) with NEW! reversible dual size (.045 and 1/16 in) VK drive rolls **or** Dura-Flux Flux Cored gun (12VS) with NEW! reversible dual size (.068/.072 and 5/64 in) VK drive rolls!



Bernard® Q300 shown.

Smaller 8VS size is ergonomically sound, lightweight, and well balanced for ease of carrying to remote welding sites. Fits through a 14 in (25 mm) manhole/manway.

Polypropylene case with built-in slide rails has door for changing wire with the feeder in a vertical position.

Potted and trayed main printed circuit board for the harshest environments adds exceptional reliability. Board has full-trigger isolation so a shorted gun trigger will not affect feeder operation.

Improved contactor for high-amperage, high duty cycle applications.

Digital meters with SunVision™ technology can display voltage, wire speed, and also amperage if desired. Meters can be seen clearly even in direct sunlight. (8VS: meters are optional.)

Trigger hold, wire jog, and gas purge are located on front panel. (8VS: trigger hold is optional.)

Wider voltage range for small and large wires with no contactor chatter or arc outages.

Double-filtered gas valve helps keep dirt from clogging and affecting gas flow.

Excellent starts and superior arc performance for all types and sizes of wires whether using CV or CC power supply. (CV is recommended for best arc performance.)

Industrial Use with CC/CV, DC Power Sources.

Processes

- MIG (GMAW)
- Flux Cored (FCAW)

Suggested Power Sources

- Dimension™ Series (pg 48)
- Dimension™ NT 450 (pg 49)
- XMT® Series (pg 50)
- Mark VI™ (pg 54)
- Bobcat™ (pg 57/60/61)
- Trailblazer® (pg 62/63)
- PRO 300 (pg 65)
- Big Blue® 400/500 (pg 66)

Suggested Guns

- Bernard® Q300 (GMAW)
- Bernard® Dura-Flux™ (FCAW)
- Roughneck® (GMAW) (pg 79)
- Ironmate™ FC-1260 (FCAW) (pg 79)

Most Popular Accessories

- 8VS Meter Kit #300 331 (pg 78)
- 8VS Trigger Hold #300 332
- Flowmeter Kit #300 343

See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number	Input Power	Input Welding Circuit Rating	Wire Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
SuitCase X-TREME 8VS	(#300 093) w/Bernard® Q300 Gun (#300 093-01-1) w/Bernard® Q300 Gun and Meters (#300 093-02-1) w/Bernard® Q300 Gun, Meters and Trigger Hold	Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 Max. OCV	330 A at 60% Duty Cycle	50–780 IPM (1.3–19.8 m/min) Actual range in CC mode is dependent on arc voltage applied	Solid Wire: .023–.062 in (0.6–1.6 mm) Flux Cored: .030–.062 in (0.8–1.6 mm)	8 in (203 mm), 14 lb (6.4 kg)	H: 12¾ in (324 mm) W: 7¼ in (184 mm) D: 18 in (457 mm)	28 lb (13 kg)
SuitCase X-TREME 12VS	(#195 500) w/Bernard® Q300 Gun (#300 414) w/Bernard® Dura-Flux™ Gun		425 A at 60% Duty Cycle		Solid Wire: .023–5/64 in (0.6–2.0 mm) Flux Cored: .030–5/64 in (0.8–2.0 mm)	12 in (305 mm), 45 lb (20 kg)	H: 15½ in (394 mm) W: 9 in (229 mm) D: 21 in (533 mm)	35 lb (15.9 kg)

Miller SuitCase® Selection Chart

1. Not recommended for use with AC power sources. 2. When paired with CC power source, VS feeder will vary wire feed speed (WFS) to maintain voltage. As such, accuracy of parameters and deposition rates cannot be guaranteed. For critical welds, Miller recommends using CV power source.

Note: Use CV power source for best performance when wire welding. Also, set VS feeder to "CV mode" and welder to "CV or volt sense feeder mode" if applicable.

Application Requirements	SuitCase 8RC	SuitCase 12RC	SuitCase X-TREME 8VS	SuitCase X-TREME 12VS	Selection Guidance
Feeder Type	Remote Control (constant speed)	Remote Control (constant speed)	Voltage Sensing	Voltage Sensing	Use RC feeders when welding procedures or codes specify wire feed speed and voltage.
Power Source Compatibility	CV Power Source (must have 14-pin connection)	CV Power Source (must have 14-pin connection)	DC ¹ CC/CV	DC ¹ CC/CV	VS feeders offer flexibility, as they work with almost any welder ² .
Physical Specifications					
Spool Size/Capacity	8 in/14 lb	8 in/14 lb or 12 in/45 lb	8 in/14 lb	8 in/14 lb or 12 in/45 lb	Use 12RC or 12VS for larger wire spools. Use 8VS or 8RC when weight or size is a factor.
Weld Performance					
Duty Cycle	500 Amps at 100%	500 Amps at 100%	330 Amps at 60%	425 Amps at 60%	Use 12RC or 12VS to maximize deposition rates with larger wires.
Recommended Distance Between Feeder and Power Source	75 ft (150 ft "round trip" cable length)	75 ft (150 ft "round trip" cable length)	400+ ft (distance depends on the power source, weld cable size used, and welding amperages)	400+ ft (distance depends on the power source, weld cable size used, and welding amperages)	Use VS feeders when longer distances between the power source and feeder are required.
Simplicity & Control					
Number of Feeder Connections Back to Power Source	2 (weld cable, 24 VAC power/14-pin control cable)	2 (weld cable, 24 VAC power/14-pin control cable)	1 (weld cable)	1 (weld cable)	VS feeders have less cable to carry, damage or lose.
Remote Control Capabilities	Voltage Set at Feeder	Voltage Set at Feeder	Voltage or Current Set at Power Source	Voltage or Current Set at Power Source	RC feeders add convenience — no need to return to the power source to adjust voltage parameters.
Gas Purge, Wire Jog and Trigger Hold	- Gas Purge Standard - Wire Jog (inside case) - Trigger Hold Optional	- Gas Purge Standard - Wire Jog (inside case) - Trigger Hold Optional	- Gas Purge Standard - Wire Jog (front panel) - Trigger Hold Optional	All Standard (front panel)	VS and RC feeders have most often used controls conveniently located on front panel.



SuitCase® 8RC and 12RC

See Literature No. M/6.5

The SuitCase 8RC and 12RC offer remote voltage control, light weight and small size, with superior durability needed to stay in service and meet production schedules.

Portable!



SuitCase 8RC

SuitCase 12RC

Models include Bernard® Q300 MIG gun with NEW! reversible dual size (.045 and 1/16 in) VK drive rolls!



*Other models available. A remote extension cord must be ordered separately.

The SuitCase 12RC door opens with feeder in upright position and has built-in slide rails.

Totally enclosed, impact-resistant, flame-retardant case provides strength and durability, and protects components and welding wire from moisture, dust and other contaminants.

Ergonomically sound, lightweight, modular design is well balanced, and allows improved mobility and ease of carrying to remote welding sites and for serviceability.

Flexibility to run a variety of wires up to 5/64 in diameter.

Quick-change drive rolls are easy to change—no tools required.

Drive roll accessibility makes it easy to install wire, adjust tension and change drive rolls.

Carrying handle folds up out of operators way, yet large enough for a gloved hand to carry.

Remote voltage control—standard for exceptional weld quality.

Gas solenoid valve—standard.

Industrial ● CV DC

Use with CV, DC Power Sources.

Processes

- MIG (GMAW)
- Flux Cored (FCAW)

Suggested Power Sources

- CP-302 (pg 31)
- Deltaweld® 302 (pg 32)
- Invision® 350 MPa/456MP (pg 33)
- XMT® Series (except VS model) (pg 50)
- Trailblazer® (pg 62/63)
- PipePro® 304 (pg 67)

Suggested Guns

- Bernard® Q300 (GMAW)
- Bernard® Dura-Flux™ (FCAW)
- Roughneck® (GMAW) (pg 79)
- Ironmate™ (FCAW) (pg 79)

Most Popular Accessories

- Remote Extension Cords (1 required) 25, 50, or 75 ft (7.6, 15, or 23 m) (pg 77)
- Meter Kits (pg 78)
- Shielding Gas Filter #195 189 Field
- Flowmeter Kit #300 343
- Volt/Current Sensor Kit #195 194 Field (For both models—required for digital meter operation with power sources not having pins F and H in 14-pin receptacle.)

See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number*	Input Power	Input Welding Circuit Rating	Wire Speed	Wire Type and Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
SuitCase 8RC	(#194 938) w/Bernard® Q300 Gun and Remote Voltage (#194 938-01-1) w/Bernard® Q300 Gun, Meters, Remote Voltage and Trigger Hold	24 VAC, 7 A, 50/60 Hz	500 A at 100% Duty Cycle	75–700 IPM (1.9–17.8 m/min)	Solid Wire: .023–5/64 in (0.6–2.0 mm) Flux Cored: .030–5/64 in (0.8–2.0 mm)	8 in (203 mm), 14 lb (6.4 kg)	H: 14½ in (368 mm) W: 6½ in (165 mm) D: 15½ in (397 mm)	22 lb (10 kg)
SuitCase 12RC	(#194 940) w/Bernard® Q300 Gun and Remote Voltage (#194 940-01-1) w/Bernard® Q300 Gun, Meters, Remote Voltage and Trigger Hold	24 VAC, 10 A, 50/60 Hz			Solid Wire: .023–5/64 in (0.6–2.0 mm) Flux Cored: .030–5/64 in (0.8–2.0 mm)	12 in (305 mm), 44 lb (20 kg)	H: 15½ in (394 mm) W: 9 in (229 mm) D: 21 in (533 mm)	25.5 lb (11.6 kg)

The Industry's Most Powerful E-News!

What's fast, fresh and free? Power Click, Miller's E-Newsletter! Delivered to your inbox throughout the year, Power Click covers all the latest news on welding products and applications. Read feature stories and how-to articles, participate in welding discussions and be the first to learn about exclusive offers. Activate your FREE subscription at MillerWelds.com/powerclick.



Turn your "inbox" into an "information box." Sign up for Miller's Power Click eNewsletter at MillerWelds.com/powerclick

Spoolmate™ 100 Series See Literature No. M/1.45

Reliable and economical spool gun with excellent feeding to weld aluminum. For use with all Millermatic® 140 and 180 models, Millermatic® Passport® Plus, Millermatic® 211 Auto-Set™ with MVP™, and Renegade™ 180.



Portable!

Model **includes** carrying case, extra contact tips and nozzle!

Light industrial spool gun rated at 135 amps at 30% duty cycle.

12 ft direct-connect cable with heavy-duty strain relief provides reach and accessibility to your work.

Dual V-knurled drive rolls with adjustable tension control for consistent feeding of different types of wire.

Clear spool canister protects the wire and allows you to easily see the spool.

Convenient carrying case holds gun and cable, extra contact tips, nozzle and wire (wire not included).

Light Industrial 

Use with CV, DC Power Sources.

Process

- MIG (GMAW) with aluminum and other soft alloy wires

Suggested Power Sources

- Millermatic® 140 Auto-Set™ (pg 25)
- Millermatic® 180 Auto-Set™ (pg 25)
- Millermatic® Passport® Plus (pg 26)
- Millermatic® 211 Auto-Set™ with MVP™ (pg 26)
- Renegade™ 180 (pg 57)

Most Popular Accessories

- Retrofit Kit for Millermatic 140 and 180 models (prior to serial #LH210051N) #300 409
- See your Miller distributor for other popular Miller options and accessories.

Stock Number (#300 371)	Welding Output Rating	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Gun Weight
	135 A at 30% Duty Cycle	5–365 IPM (MM 140) 65–625 IPM (MM 180) 70–370 IPM (MM Passport Plus) 65–625 IPM (Renegade 180)	.030–.035 in (0.8–0.9 mm) aluminum .023–.035 in (0.6–0.9 mm) steel and stainless steel	4 in (102 mm)	H: 11½ in (291 mm) W: 2¼ in (57 mm) L: 8 in (203 mm)	5 lb (2.3 kg) with cable assembly 9 lb (4.1 kg) with case

Spoolmate™ 3035 See Literature No. M/1.5

Highly reliable and economical spool gun with excellent feeding to weld aluminum.



Portable!

Light industrial spool gun rated at 150 amps at 60% duty cycle.

Cable sheath and spring strain relief.

20 ft weld/control cables provide reach and accessibility to your work.

Lightweight and well-balanced to improve operator comfort.

Spool canister protects the wire and allows you to easily see the spool.

Easy to remove barrel assembly.

Spoolmate Hook-Up Recommendations

**Discontinued product.*

CV Power Supply	Spoolmate 3035
Millermatic® Challenger 172*, 175*, 180*	Need SGA 100 #043 856
Millermatic® 185* Prior to Serial #KH376829 After Serial #KH376829	Need Retrofit Kit #186 871 and Field Kit #207 642
Millermatic® DVI™*	Direct Hook-Up with Field Kit #207 642
Millermatic® DVIz™	Direct Hook-Up with Field Kit #300 338
Millermatic® 210*, 212*	Direct Hook-Up (no switch required)
Bobcat™ 225	Need SGA 100C #043 857

Light Industrial 

Use with CV, DC Power Sources.

Process

- MIG (GMAW) with aluminum and other soft alloy wires

Suggested Power Sources

- Millermatic® DVIz™ (pg 27)
- Bobcat™ 225 (pg 60)

Most Popular Accessories

- 25 ft Extension Kit #194 996 (pg 77)
- SGA 100 #043 856 (pg 82)
- SGA 100C #043 857 (pg 82)
- Heavy-Duty Barrel Assembly #195 375 (200 A at 60% Duty Cycle)

See your Miller distributor for other popular Miller options and accessories.

Stock Number (#195 016)	Welding Output Rating	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Gun Weight with Cable Assembly
	150 A at 60% Duty Cycle	115–715 IPM	.023–.035 in (0.6–0.9 mm) aluminum, steel and stainless steel	4 in (102 mm)	H: 11½ in (291 mm) W: 2¼ in (57 mm) L: 8 in (203 mm)	9.1 lb (4.1 kg)

Pistol Grip Guns

See Literature No. M/1.73

Spoolmatic® spool guns and XR™ push-pull guns are the professional's choice for exceptional aluminum welding results in industrial or commercial applications.



Spoolmatic pistol grip spool gun

Portable!



XR-A pistol grip push-pull gun

Engineered for operator comfort, our well-balanced pistol grip guns give you portability and a 15 or 30 ft cable assembly to access those hard-to-reach welds.

Patented quick-change, single-turn contact tip provides excellent performance and ease of replacement.

Barrels are Roughneck® and Bernard® Centerfire™ compatible.

Easy access to drive assembly and removable head tube reduces service time by allowing a simple means of changing drive rolls and head tube or performing routine maintenance without disassembly of gun.

NEW! Improved, more robust drive housing machined from aluminum extrusion instead of a casting.

Wire speed adjustment on the gun handle and reversible drive rolls save time and money.

Spoolmatic Spool Gun Additional Features

Built-in gas valve eliminates the need to purge long gas lines.

Two-stage trigger includes gas preflow.

Spool canister rotates 180°.

XR Push-Pull Gun Additional Features

Both air- or water-cooled versions are available.

Trigger hold reduces fatigue by allowing operator to weld without holding trigger. (Feature only available when paired with XR-Control.)

Replaceable feed cable liner reduces parts cost and service time by allowing a simple means of removing and replacing liner and not the complete feed cable.

Industrial ● Spoolmatic 15A/30A
Heavy Industrial ● XR-Pistol

CC CV DC Use with CC/CV, DC Power Sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested Power Sources

For Spoolmatic Guns Only

- Millermatic® 212 Auto-Set™ (pg 27)
- Shopmate™ Series (pg 48)
- Miller Legend® 302 (pg 57)
- Bobcat™ (pg 57/60/61)

For Spoolmatic and XR Guns

- Millermatic® 252 (pg 28)
- Millermatic® 350 (pg 29)
- CP-302 (pg 31)
- Dimension™ Series (pg 48)
- Dimension™ NT 450 (pg 49)
- XMT® Series (except VS model) (pg 50)
- Trailblazer® (pg 62/63)
- PipePro® 304 (pg 67)

Most Popular Accessories

For Spoolmatic Guns Only

- WC-24 #137 549 (pg 82)
- WC-115A #137 546 (pg 82)
- WC-115A (with contactor) #137 546-01-1 (pg 82)
- WC-115 Contactor Kit #137 548 (pg 82)

For XR Gun Only

- XR-Control (pg 43)
(Required with most power sources. See Hook-Up Recommendations chart at left.)

See your Miller distributor for other popular Miller options and accessories.

Hook-Up Recommendations

*Discontinued product.

Spoolmatic 15A/30A Pistol Grip Guns	CV Power Supply	Control/Module/Cable
	Millermatic® Vintage*	Need Module #043 084
	Millermatic® DVI™*, DVIz™, 210*, 212*	Need Adapter Cable #195 287 (WFS controlled at machine)
	Millermatic® 212 Auto-Set™, 250X*, 251*, 252, 300 w/meters*, 350/350P, Shopmate™ Series	Direct Hook-Up
	CP Series, Deltaweld® Series, Dimension™ Series, Regency® 250*, Shopmaster™*, XMT® Series	Need WC-24 #137 549
	Bobcat™ Series, Miller Legend® 302	Need WC-115A #137 546-01-1
	PipePro™ 304, Trailblazer® 275 DC, 302 and 302 Air Pak™	Need WC-24 #137 549
XR 15A/30A and 15W/30W Pistol Grip Guns	Millermatic 252, 350/350P	Direct Hook-Up
	Deltaweld® Series, Dimension™ Series, Invision™ Series, XMT® Series (except VS model), PipePro™ 304, Trailblazer® 275 DC, 302 and 302 Air Pak™	XR™-Control (see page 43)

Order drive rolls and drive roll kits separately from guns. A=Air-Cooled W=Water-Cooled

Model	Stock Number	Welding Output Rating	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Gun Weight with Cable Assembly
Spoolmatic 15A	(#195 156) 15 ft (4.5 m) cable	200 A at 100% Duty Cycle	70–875 IPM (1.8–22.2 m/min)	.030–1/16 in (0.8–1.6 mm) aluminum wire and hard wire up to .045 in (1.1 mm)	4 in (102 mm)	H: 10¼ in (260 mm)	9 lb (4.1 kg)
Spoolmatic 30A	(#130 831) 30 ft (9 m) cable					L: 15½ in (384 mm)	14 lb (6.4 kg)
XR-A Pistol Gun	(#198 127) 15 ft (4.6 m) cable	Air: 200 A at 100% Duty Cycle	70–875 IPM (1.8–22.2 m/min)	.030–1/16 in (0.8–1.6 mm) aluminum wire	—	H: 7¾ in (187 mm)	13 lb (5.9 kg)
	(#198 128) 30 ft (9 m) cable					W: 1¾ in (48 mm)	21 lb (9.6 kg)
XR-W Pistol Gun	(#198 129) 15 ft (4.6 m) cable	Water: 400 A at 100% Duty Cycle				L: 10¾ in (270 mm)	14 lb (6.4 kg)
	(#198 130) 30 ft (9 m) cable					21.5 lb (9.7 kg)	

Gooseneck-Style Gun See Literature No. M/1.71

XR-Aluma-Pro™ guns work in conjunction with the XR-Control or select Millermatic machines to provide an outstanding solution for push-pull applications.



Portable!

A=Air-Cooled W=Water-Cooled

Accepts patented, single-turn, quick-change FasTip™ and Bernard® Centerfire™ contact tips.

Replaceable feed cable, easy drive assembly access and removable head tube liner reduce service time.

Isolated, common, knurled drive rolls provide positive feeding performance.

Rotatable, self-seating head tube for various welding positions, reducing operator fatigue.

Hook-Up Recommendations

**Discontinued product.*

XR-Aluma-Pro Gooseneck-Style Gun	CV Power Supply	Control/Module/Cable
	Millermatic 252, 350/350P	Direct Hook-Up
	Deltaweld® Series, Dimension™ Series, Invision™ Series, XMT® Series (except VS model), PipePro™ 304, Trailblazer® 275 DC, 302, and 302 Air Pak™	XR™-Control (see below)

Heavy Industrial 
Use with CC/CV, DC Power Sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested Power Sources

- Millermatic® 252 (pg 28)
- Millermatic® 350 (pg 29)
- Deltaweld® Series (pg 32)
- Invision™ 350 MPa/456MP (pg 33)
- XMT® Series (except VS model) (pg 50)
- Trailblazer® (pg 62/63)

Most Popular Accessories

- XR-Control (see below) (Required with most power sources. See Hook-Up Recommendations chart at left.)
- See your Miller distributor for other popular Miller options and accessories.

Gun Style	Stock Number	Weld Current Capacity	Wire Speed	Wire Diameter Capacity	Dimensions	Net Weight
XR-Aluma-Pro A Gun	(#300 000) 15 ft (4.6 m) (#300 001) 25 ft (7.6 m) (#300 264) 35 ft (10.6 m)	Air: 300 A at 100% Duty Cycle	70–900 IPM (1.8–23 m/min)	.030–1/16 in (0.8–1.6 mm) aluminum wire Wire kit #230 708 required to run 1/16 in (1.6 mm) wire	H: 5 in (127 mm) W: 2½ in (64 mm) L: 17 in (432 mm)	2.5 lb (1.1 kg)
XR-Aluma-Pro W Gun	(#300 003) 15 ft (4.6 m) (#300 004) 25 ft (7.6 m) (#300 265) 35 ft (10.6 m)	Water: 400 A at 100% Duty Cycle				2.9 lb (1.3 kg)

XR™-Control See Literature No. M/1.7

The XR push-pull wire feed systems offer the choice of air- or water-cooled, gooseneck- or pistol-style MIG guns (ordered separately) for truly customized systems configured for particular applications.



Portable!

Shown with options installed.

Standard digital wire feed speed and volt meters provide easy indication and control of weld parameters.

Unique solid-state control circuit permits XR systems to operate with most CC, CV, or CC/CV DC welding power sources.

True push-pull design provides continuous torque to wire. Gun motor controls actual wire feed speed at arc. Each motor works in concert to provide accurate and positive wire feed speed.

Master/gun wire feed speed control improves resolution by limiting speed range at the gun.

Adjustable wire run-in control improves arc starting.

XR-Push-Pull Drive Roll Kit (Required)

Wire Size	XR-Pistol	XR-Aluma-Pro
.030 in (0.8 mm)	#195 213	#194 118
.035 in (0.9 mm)	#195 212	#194 118
.040 in (1.0 mm)	#195 211	#196 301
.047 in (1.2 mm)	#195 210	#194 119
.062 in (1.6 mm)	#195 209	#195 591

XR-Pistol kit consists of gun drive rolls, push-pull feeder drive rolls and five FasTip™ contact tips. Aluma-Pro kits contain XR-Control drive rolls only.

Heavy Industrial 
Use with CC/CV, DC Power Sources.

Processes

- MIG (GMAW) with aluminum and other soft alloy wires
- Pulsed MIG (GMAW-P) with optional pulsing power source

Suggested Power Sources

- Deltaweld® Series (pg 32)
- Invision™ 350 MPa/456MP (pg 33)
- XMT® Series (except VS model) (pg 50)
- Trailblazer® (pg 62/63)

Suggested Guns

- XR™-Pistol (GMAW) (pg 42)
- XR-Aluma-Pro™ (GMAW) (see above)

Most Popular Accessories

- Remote Extension Cords (pg 77)
25 ft (7.6 m) #122 973
50 ft (15 m) #122 974
75 ft (23 m) #122 975
 - Optima™ MIG Pulse Control #043 389 (pg 78)
 - PSA-2 Control #141 604 (pg 82)
- See your Miller distributor for other popular Miller options and accessories.

Stock Number	Input Power	Wire Speed	Maximum Spool Size Capacity	Dimensions	Net Weight
(#181 538) XR-Control w/Digital Display (#181 538-03-3) XR-Control w/Digital Display, Voltage Control and Gas Flow Meter	24 VAC, 50/60 or 100 Hz	70–875 IPM (1.8–22.2 m/min)	12 in (305 mm)	H: 16 in (406 mm) W: 9¼ in (235 mm) D: 21¼ in (540 mm)	38 lb (17.2 kg)

22A and 24A

See Literature No. M/11.0

**Includes Bernard® Q300
15-ft MIG Welding Gun!**

Simple to use, but built with the strength and flexibility to handle industrial manufacturing and fabricating, the 22A and 24A deliver proven reliability and economy.

All models **include** Bernard® Q300 MIG gun and .035/.045 drive rolls!



Both wire feeders are **ideal for most high-duty-cycle applications** requiring day-in/day-out trouble-free operation.

Trigger hold control for long extended welds.

Two gear-driven drive rolls on 22A for smooth, positive wire feed. **Four gear-driven drive rolls** on 24A for larger wire sizes.

On-board burnback and motor ramp control for excellent starting and stopping performance.

Heavy-duty 16-gauge metal enclosure for extra durability.

Remote voltage is standard on 24A.

Optional presettable voltage and wire feed speed on most power sources for 22A.

Industrial CV DC

Use with CV, DC Power Sources.

Processes

- MIG (GMAW)
- Flux Cored (FCAW)

Suggested Power Sources

- CP-302 (pg 31)
- Deltaweld® Series (pg 32)
- Invision™ 350 MPa (pg 33)
- Shopmate™ Series (pg 48)
- XMT® Series (except VS model) (pg 50)

Suggested Guns

- Bernard® (GMAW)
- Roughneck® (GMAW) (pg 79)

Most Popular Accessories

- Remote Extension Cords (pg 77)
- Spool Adapter #047 141 (pg 82)
- Turntable Assembly #146 236 (pg 82)
- Digital Display #186 498
- Pre/Post Flow and Spot Control #186 496
- Voltage Control (22A only) #194 211

See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number	Input Power	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
22A	(#193 066) (#193 066-01-1) w/Run-In Control (#193 066-02-2) w/Digital Display and Voltage Control	24 VAC, 7 A, 50/60 Hz	75–750 IPM (1.9–19 m/min)	22A: .023–5/64 in (0.6–2.0 mm)	60 lb (27 kg) coil	H: 11 in (279 mm) W: 10¾ in (273 mm) D: 2¾ in (597 mm)	22A: 36 lb (15.4 kg)
				24A: .023–3/32 in (0.6–2.4 mm)			24A: 40 lb (18 kg)
24A	(#195 112) (#195 112-00-1) w/Digital Display						

R-115

See Literature No. M/8.0

**Includes Bernard® Q400
15-ft MIG Welding Gun!**

Universal, constant-speed, semi-automatic wire feeder offers easy connection to Miller and competitive welding power sources that only supply 115 VAC power.

Model **includes** Bernard® Q400 MIG gun (drive rolls not included)!



Universal feeder adapts to many power sources with **interconnecting cord** (sold separately).

Convenient terminal block adapts to existing feeder interconnecting cords.

Industrial four-drive-roll system offers exceptional feed performance and reliability.

Heavy-duty 16-gauge metal enclosure for durability in harsh environments.

Motor ramp and burnback control aids in starting and stopping performance to match power source characteristics.

Trigger hold control for making extended welds without holding gun trigger.

Gas solenoid for gas-shielded wires.

Quick-change drive rolls (ordered separately) — no tools required.

Optional run-in control (#193 391) to control wire speed prior to arc initiation.

Industrial CV DC

Use with CV, DC Power Sources.

Processes

- MIG (GMAW)
- Flux Cored (FCAW)

Compatible Power Sources (Interconnecting Cords)

- Miller w/14-pin connector (#194 842)
- Old-style Miller and Aircro w/2- and 3-prong (Hubbell style) twistlock connectors (#193 387)
- Hobart w/115 V wall-type plug and 5-pin plug (#193 383)
- Hobart w/19-pin plugs (#193 381)
- Lincoln w/5-wire terminal strip connection (#193 385)
- Lincoln w/14-pin connectors (#193 384)
- Aircro w/straight blade 115 V wall-type plug and 2-prong twistlock (#193 386)
- L-Tech w/7-pin connectors (#193 379)
- L-Tech w/19-pin connectors (#193 382)
- Thermal Arc
- ... power sources supplying 115 V

*Power source interconnecting cord and drive roll kits must be ordered separately.

Stock Number*	Input Power	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
(#193 164)	115 VAC, 2 A, 50/60 Hz	75–750 IPM (1.9–19 m/min)	.023–5/64 in (0.8–2.0 mm)	60 lb (27 kg) coil	H: 11 in (279 mm) W: 10¾ in (273 mm) D: 2¾ in (597 mm)	40 lb (18 kg)



S-32S and S-32SL

See Literature No. M/6.21

Simple to use, but with all the features needed for heavy-duty wire feed applications... that's the S-32S and S-32SL wire feeders from Miller.



S-32S wire feeder shown with optional Wire Reel Assembly.

Operates on open-circuit voltage and arc voltage and can be used with most constant-voltage and constant-current DC-type welding power sources.

Handles high-end speed for small diameter wires, and low-end speed with power for the more demanding larger diameter wires.

Solid-state speed control and brake circuit for exceptional control and service life.

Voltage-sensing control circuit with CC/CV switch.

Operates on either straight or reverse polarity.

High-torque, 24 VDC, two-drive-roll system delivers consistent performance.

Quick-change drive rolls and quick connect feature for Miller guns — no tools required.

Accepts larger 60 lb (27 kg) coils with optional Wire Reel Assembly (#108 008).

Heavy Industrial Use with CC/CV, DC Power Sources.

Processes

- MIG (GMAW)
- Flux Cored (FCAW)

Suggested Power Sources

- Gold Star® Series (pg 12)
- Dimension™ Series (pg 48)
- Mark VI™ and VIII®.2 (pg 54)
- Bobcat™ (pg 57/60/61)
- Trailblazer® (pg 62/63)
- PRO 300 (pg 65)
- Big 40® (pg 66)
- Big Blue® Air Pak™ (pg 68)
- Big Blue® Turbo (pg 68)

Suggested Guns

- Bernard® (GMAW)
- Roughneck® C-Series (pg 79)
- Ironmate™ Series (pg 79)

See distributor for Miller accessories.

*Drive roll kits must be ordered separately.

Model/Stock Number*	Input Power	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
S-32S (#088 816)	Operates on open-circuit voltage and arc voltage 15–100 V	50–700 IPM (1.3–18 m/min)	.023–5/64 in (0.6–2.0 mm)	60 lb (27 kg) coil	H: 10 in (254 mm) W: 10 3/4 in (273 mm) D: 22 1/2 in (572 mm)	33 lb (15 kg)
S-32SL (#109 294)		25–325 IPM (0.6–8.2 m/min)	5/64–7/64 in (2.0–2.8 mm)			

70 Series Swingarc™

See Literature No. M/13.11

Swingarc boom-mounted wire feeders bring an extra dimension of flexibility and efficiency to weld stations dealing with large weldments, or wherever operator mobility is required.

Single-wire Swingarc shown with pipe post, power source, welding gun, and optional Swingpak™ base.



Models in 8, 12 or 16 ft lengths maximize output. The unique counterbalance design makes it easy and convenient to position the boom exactly where it is needed.

360-degree rotation and 60-degree lift angle maximizes work area (16, 24 or 32 ft diameter work area).

Standard 10 ft 14-pin interconnecting cord included.

In-boom cable routing organizes hoses and cables, protects them from damage.

Quick-change drive rolls mean no tools are required by the operator to change drive rolls.

Heavy Industrial Use with CV, DC Power Sources.

Processes

- MIG (GMAW)
- Flux Cored (FCAW) (gas- and self-shielded)

Suggested Power Sources

- CP-302 (pg 31)
- Deltaweld® Series (pg 32)
- Invision™ (pg 33)
- Dimension™ Series (pg 48)
- Dimension™ NT 450 (pg 49)
- XMT® Series (except VS) (pg 50)

Suggested Guns

- Bernard® (GMAW)

Most Popular Accessories

- Remote Extension Cords (pg 77)
- Wire Reel Assembly #108 008
- Swingpak™ Base #183 997
- 4 ft Pipe Post with 18 in Base #149 838
- 6 ft Pipe Post with 18 in Base #149 839
- 4 ft Pipe Post with single/dual spool carrier #300 353
- 6 ft Pipe Post with single/dual spool carrier #300 352

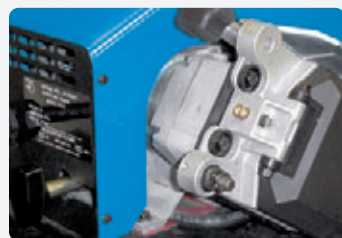
See your Miller distributor for other popular Miller options and accessories.

Model/Stock Number	Input Power	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Net Weight with Feeder
8 ft (2.4 m) Booms with Single-Wire Feeders SS-74S8 (#300 398) w/S-74S SS-74D8 (#300 399) w/S-74D SS-74DX8 (#300 400) w/S-74DX	24 VAC, 10 A, 50/60 Hz	50–780 IPM (1.3–19.8 m/min) Optional High Speed: 92–1435 IPM (2.3–36.6 m/min)	.023–1/8 in (0.6–3.2 mm) When using 3/32–1/8 in (2.4–3.2 mm) wires, consult factory for low speed options.	60 lb (27 kg) coil	8 ft Boom: 110 lb (50 kg) 12 ft Boom: 160 lb (73 kg) 16 ft Boom: 210 lb (95 kg)
12 ft (3.7 m) Booms with Single-Wire Feeders SS-74S12 (#195 063) w/S-74S SS-74D12 (#195 065) w/S-74D SS-74DX12 (#195 067) w/S-74DX					
16 ft (4.9 m) Booms with Single-Wire Feeders SS-74S16 (#195 064) w/S-74S SS-74D16 (#195 066) w/S-74D SS-74DX16 (#195 068) w/S-74DX					
8 ft (2.4 m) Booms with Dual-Wire Feeders DS-74S8 (#300 401) w/D-74S DS-74D8 (#300 402) w/D-74D DS-74DX8 (#300 403) w/D-74DX					8 ft Boom: 134 lb (61 kg) 12 ft Boom: 207 lb (94 kg) 16 ft Boom: 280 lb (127 kg)
12 ft (3.7 m) Booms with Dual-Wire Feeders DS-74S12 (#195 069) w/D-74S DS-74D12 (#195 071) w/D-74D DS-74DX12 (#195 073) w/D-74DX					
16 ft (4.9 m) Booms with Dual-Wire Feeders DS-74S16 (#195 070) w/D-74S DS-74D16 (#195 072) w/D-74D DS-74DX16 (#195 074) w/D-74DX					

70 Series

See Literature No. M/3.0
Includes Bernard® Q400 15-ft MIG Welding Gun!

Raising the bar for industrial-class wire feeders with all the traditional features, plus enhanced flexibility provided by features such as trigger hold, automatic run-in, and toolless rotatable drive.



Toolless rotatable drive assembly allows operator to rotate the drive housing, eliminating severe bends in the wire feed path which reduce gun liner life. This feature also aids in feeding difficult wires.

Models include performance matched Bernard® Q400 MIG gun, .035/.045 drive rolls and Centerfire™ contact tips!

Designed to be easily upgradeable by simply changing the front panel and adding the tachometer feedback system. Bench models are also available in both single (S-74) and dual models (D-74). The best just got better!

Automatic run-in control significantly improves arc starts. Run-in can be independently set on the DX model.

Trigger hold allows the operator to make long welds without having to hold the trigger continuously. Reduces operator fatigue.

Standard 10 ft 14-pin interconnecting cord is included.

DX Models Additional Features

Dual schedule control allows the operator to switch between two welding parameters without readjusting the machine, saving time and enhancing quality.

Sequence control gives the operator complete control of the welding parameters: preflow, run-in, weld time, crater, burnback and postflow.

Welding process range control locks parameters at a set percentage of welding parameters to ensure welding procedures and quality standards are maintained.

Four weld programs allow the operators to store four independent welding parameters reducing weld setup time.

Heavy Industrial CV DC

Use with CC/CV, DC Power Sources.

Processes

- MIG (GMAW)
- Flux Cored (FCAW) (gas- and self-shielded)

Suggested Power Sources

- CP-302 (pg 31)
- Deltaweld® Series (pg 32)
- Invision™ (pg 33)
- Dimension™ Series (pg 48)
- Dimension™ NT 450 (pg 49)
- XMT® Series (except VS model) (pg 50)

Suggested Guns

- Bernard® (GMAW)

Most Popular Accessories

- Feeder Cart #142 382 (pg 74)
- Remote Extension Cords (pg 77)
 - 25 ft (7.6 m) #122 973
 - 50 ft (15 m) #122 974
 - 75 ft (23 m) #122 975
- **NEW!** Aluminum Gun Kits — for pushing aluminum wire (pg 79)
 - .035, 10 ft (3 m) #300 541
 - .047, 12 ft (3.7 m) #300 542
 - 1/16, 12 ft (3.7 m) #300 543
 Kits include .035, .047 or 1/16 in drive rolls and 10 or 12 ft Bernard® Q-Gun™
- Spool Adapter #047 141 (pg 82)
- Turntable Assembly #146 236 (pg 82)
- Wire Straightener (pg 82)
- Control Detachment Kit
 - 10 ft #194 914 (Single)
 - 25 ft #194 913 (Single)
 - 25 ft #194 995 (Dual)
 - 50 ft #300 351 (Single)
- Hanging Bail #058 435
- Wire Reel Assembly #108 008
- Conversion Kit — For old power source to new 70 Series wire feeder #195 043
- .023–1/8 in drive rolls

See your Miller distributor for other popular Miller options and accessories.

Models

- 74S** Standard
- 74D** Digital Meters
- 74DX** Deluxe — Digital Full Feature

Stock Number	Input Power	Wire Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
Single-Wire Models S-74S (#195 057) S-74S (#195 057-01-2) w/High-Speed Motor S-74D (#195 058) S-74D (#195 058-01-1) w/High-Speed Motor S-74DX (#195 059) S-74DX (#195 059-01-1) w/High-Speed Motor	24 VAC, 10 A, 50/60 Hz	50–780 IPM (1.3–19.8 m/min) Optional High Speed: 92–1435 IPM (2.3–36.6 m/min)	.023–1/8 in (0.6–3.2 mm) When using 3/32–1/8 in (2.4–3.2 mm) wires, consult factory for low speed options.	60 lb (27 kg) coil	H: 14 in (356 mm) W: 12 in (305 mm) D: 26½ in (673 mm)	58 lb (26 kg)
Dual-Wire Models D-74S (#195 060) D-74D (#195 061) D-74D (#195 061-01-1) w/High-Speed Motor D-74DX (#195 062) D-74DX (#195 062-01-1) w/High-Speed Motor					H: 14 in (356 mm) W: 12½ in (318 mm) D: 35 in (889 mm)	87 lb (39.5 kg)



Multiprocess Power Sources and Packages for Demanding Industrial Applications

Multiprocess

Each Product Offers Three Package Options That Will Help Fit Your Specific Welding Needs



Miller's XMT® and Dimension™ Series lead the industry in multiprocess reliability, and the revolutionary new PipeWorx™ Welding System completely redefines the standard by which all multiprocess pipe fabrication systems will be judged. To learn how Miller multiprocess technologies address today's most critical construction and fabrication needs, visit the Industries & Interests section of MillerWelds.com.



MillerWelds.com/Multiprocess

Power Source Welding Performance

		250 A	300 Amp		350 Amp		450 Amp		650 Amp		
		Shopmate™ 300 DX (1-Phase) (Pg 48)	Dimension™ 302 (Pg 48)	XMT® 304 CC/CV (Pg 50)	XMT® 350 VS (Pg 50)	XMT® 350 CC/CV (Pg 50)	XMT® 350 MPa (Pg 50)	Dimension™ 452 (Pg 48)	Dimension™ NT 450 (Pg 49)	XMT® 456 CC/CV (Pg 50)	Dimension™ 652 (Pg 48)
Material	Mild Steel	●	●	●	●	●	●	●	●	●	●
	Stainless Steel	●	●	●	●	●	●	●	●	●	●
	Aluminum*	●	●	●	●	●	●	●	●	●	●
Material Thickness	Gauge (.020 - .125)	●	●	●	●	●	●	●	●	●	●
	Sheet (.125 - .375)	●	●	●	●	●	●	●	●	●	●
	Plate (.375 - 1 in)							●	●	●	●
	Plate (1+ in)							●	●	●	●
Wire Size	.030	●	●	●	●	●	●	●	●	●	●
	.035	●	●	●	●	●	●	●	●	●	●
	.045	●	●	●	●	●	●	●	●	●	●
	.052	●	●	●	●	●	●	●	●	●	●
	1/16		●	●	●	●	●	●	●	●	●
	5/64							●	●	●	●
	3/32							●	●	●	●
Process	Short Circuit	★★★	★★	★★★	★★★	★★★★	★★★★	★★	★★★★	★★★★	
	Pulsed Spray			Optional **		Optional **	★★★★			Optional **	
	Stick	★★★★	★★	★★★★	★★★★	★★★★	★★★★	★★	★★★★	★★★★	★★
	TIG	★★★★	★	★★★★	★★★★	★★★★	★★★★	★	★★★★	★★★★	★
	CAC-A	3/16"	1/4"	1/4"	5/16"	5/16"	5/16"	5/16"	5/16"	5/16"	3/8"

ICON KEY

CAPABILITY: ● Designed for ● Capable of
*XR Push-Pull System recommended for best results.

PROCESS QUALITY: ★ Good ★★ Better ★★★ Best ★★★★ Optimized

Shopmate™ Series

See Literature No. DC/12.7

Two great choices with the same outstanding arc — the versatile Shopmate power source is available as a MIG/Flux Cored model or add DC Stick/TIG capabilities with the DX model.



Shopmate 300 DX MIG Package (#951 077) shown.

*More models are available — see our Web site or Literature No. DC/12.7.

Arc Control adjusts inductance to optimize MIG arc performance.

Digital meters for presetting or monitoring welding voltage in CV mode (and amperage in CC mode on DX model only).

Built-in 10-pin connector for direct hookup of Spoolmatic® spool guns.

Built-in 14-pin connector provides quick, direct connection for 14-pin, 24 VAC Miller wire feeders and accessories.

Fan-On-Demand™ cooling system operates only when needed.

Line voltage compensation keeps welding parameters constant even when input voltages change $\pm 10\%$.

DX Model Additional Features

Process selector switch is an “operator-friendly” single process switch that eliminates the confusion of several switch combinations.

Arc Control (DIG) optimizes Stick performance.

Lift-Arc™ start provides DC TIG arc starting without the use of high frequency. Starts the arc without contaminating the weld with tungsten.

Model*	Stock Number	Amperage Range	Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz	Max. Open-Circuit Voltage	Dimensions (includes lift eye)	Net Weight
Shopmate 300 (CV)	(#907 314) 230/460/575 V (#951 058) 230/460/575 V w/MIG Pkg (#951 059) 230/460/575 V w/Spool Gun Pkg	5–400	10–35	250 A at 30 VDC, 60% Duty Cycle	208 V 230 V 460 V 575 V KVA KW 66 57 29 23 13 11.2	80 VDC	H: 24½ in (622 mm) W: 19 in (483 mm) D: 25½ in (648 mm)	177 lb (80.3 kg)
Shopmate 300 DX (CC/CV)	(#907 316) 230/460/575 V (#951 077) 230/460/575 V w/MIG Pkg							

Light Industrial



Shopmate 300

Shopmate 300 DX

Processes

- MIG (GMAW)
- Flux Cored (FCAW)
- DC Stick (SMAW)*
- DC TIG (DC GTAW)*

*DX model only.

MIG Pkg Comes Complete With

- Power source
- 22A wire feeder with Bernard® gun
- MIG kit

Spool Gun Pkg Comes Complete With

- Power source (Shopmate 300 only)
- Spoolmatic® 30A spool gun
- Spool gun kit

Most Popular Accessories

- Shopmate Running Gear/ Cylinder Rack #300 145 (pg 75)
- Shopmate 300 Kits (pg 78)

See your Miller distributor for other popular Miller options and accessories.

Dimension™ Series

See Literature No. DC/19.2

“Good!” multiprocess solution delivers dependable performance in demanding applications and combines with the 70 Series wire feeder for a complete welding solution.



Dimension 452 MIGRunner™ Package (#951 105) shown.

*More models are available — see our Web site or Literature No. DC/19.2.

**Dimensions and weight are for power source only — includes lift eye and strain relief.



See option and package descriptions on page 49.

DC multiprocess versatility with excellent arc performance in CV (MIG) and CC (Stick, TIG, CAC-A).

Digital voltage control (DVC) enables operator to preset voltage in the CV mode prior to welding.

Arc control for Stick applications allows operators more flexibility when welding in tight areas where sticking electrodes is a problem.

Line voltage compensation keeps welding parameters constant even when input voltages change $\pm 10\%$ throughout the day.

Fan-On-Demand™ cooling system operates only when needed. Reduces contaminants drawn into the machine and reduces excess noise.

Hot Start™ makes it easy to start difficult electrodes.

Power efficient for exceptional return on your investment.

Digital meters display voltage and amperage while welding and also display preset voltage in CV mode.

Heavy Industrial



Processes

- MIG (GMAW)
- Stick (SMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)

Most Popular Accessories

- SuitCase® X-TREME™ Wire Feeders (pg 39)
- 70 Series Wire Feeders (pg 46)
- Standard Running Gear #042 886 (pg 75)
- Standard Cylinder Rack #042 887 (pg 75)
- Extension Cords (pg 77)
- Industrial MIG 4/0 Kit #300 390 (pg 78)
- Bernard® Q-Gun™

When purchasing components separately please see your Miller distributor or visit MillerWelds.com for other popular Miller options and accessories.

Model*	Stock Number	Welding Mode	Amperage/Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz	Max. Open-Circuit Voltage	Dimensions**	Net Weight**
Dimension 302	(#903 216) 230/460/575 V, Machine only (#951 091) 230/460/575 V, Stationary Pkg (#951 104) 230/460/575 V, MIGRunner Pkg	CC	15–375 A	300 A at 32 VDC, 100% Duty Cycle	200 V 230 V 460 V 575 V KVA KW 57.5 50 25 20 20 12.9	60 VDC	H: 30 in (762 mm) W: 23 in (585 mm) D: 30½ in (775 mm)	361 lb (164 kg)
		CV	10–32 V		69 60 30 24 23.7 13.4	36 VDC		
Dimension 452	(#903 255) 230/460/575 V, Machine only (#951 092) 230/460/575 V, Stationary Pkg (#951 105) 230/460/575 V, MIGRunner Pkg	CC	20–565 A	450 A at 38 VDC, 100% Duty Cycle	91 79 39 31 31.4 22	65 VDC	H: 30 in (762 mm) W: 23 in (585 mm) D: 38 in (966 mm)	424 lb (192 kg)
		CV	10–38 V		104 90 45 36 35.3 22.3	43 VDC		
Dimension 652	(#903 379) 230/460/575 V, Machine only (#951 094) 230/460/575 V, Stationary Pkg (#951 112) 230/460/575 V, MIGRunner Pkg	CC	50–815 A	650 A at 44 VDC, 100% Duty Cycle	— 126 63 50.4 50 34.8	72 VDC	H: 30 in (762 mm) W: 23 in (585 mm) D: 38 in (966 mm)	545 lb (247 kg)
		CV	10–65 V				67 VDC	

Dimension™ NT 450 See Literature No. DC/19.5

A new generation of hybrid welding technology that improves arc starting and welding performance. Combining this power source with 70 Series wire feeders offers a “Better!” solution for industrial market applications.



Dimension NT 450 (#907 256)
Purchase components separately.
See list at right for most popular accessories.

DC multiprocess flexibility with outstanding arc performance in all welding processes.

Digital meters allow presetting of voltage or amperage prior to welding in all modes for more precise welding control.

Electronic arc control with digital display gives operator added flexibility on a variety of Stick electrodes.

Electronic inductance control with digital display reduces spatter and gives operator added control on a larger variety of welding wires.

Line voltage compensation keeps welding parameters constant even when input voltages change $\pm 10\%$.

Fan-On-Demand™ cooling system operates only when needed. Reduces contaminants drawn into the machine and reduces excess noise.

Power efficient for exceptional return on your investment.

Help codes to help troubleshoot and service power source. Codes are displayed on the volt/amp meters and help reduce service time.



Dimension NT 450 Stationary Package (#951 093) Stationary display without running gear/cylinder rack.

- Comes Complete With:
- Dimension NT 450 power source
 - S-74D wire feeder with drive rolls
 - Bernard® Q-Gun™
 - Industrial MIG 4/0 Kit
- (see listing at right for kit contents)



Dimension NT 450 MIGRunner™ Package (#951 106) MIGRunner system with factory-installed running gear/cylinder rack.

- Comes Complete With:
- Dimension NT 450 power source
 - S-74D wire feeder with drive rolls
 - Bernard® Q-Gun™
 - Industrial MIG 4/0 Kit
- (see listing at right for kit contents)
- Factory-installed running gear/cylinder rack

Processes

- MIG (GMAW)
- Stick (SMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A)



Most Popular Accessories

- SuitCase® X-TREME™ Wire Feeders (pg 39)
- 70 Series Wire Feeders (pg 46)
- Standard Running Gear #042 886 (pg 75)
- Standard Cylinder Rack #042 887 (pg 75)
- Extension Cords (pg 77)



Industrial MIG 4/0 Kit #300 390 (pg 78)

- Includes Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.
- Remote Controls (pg 81/82)
 - Air Filter Kit #042 939
 - Bernard® Q-Gun™

When purchasing components separately please see your Miller distributor or visit MillerWelds.com for other popular Miller options and accessories.

*While idling. **Dimensions and weight are for power source only—includes lift eye and strain relief.

Stock Number	Amperage Range	Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz					Max. Open-Circuit Voltage	Dimensions**	Net Weight
				230 V	460 V	575 V	KVA	KW			
(#907 256) 230/460/575 V, Machine only	5–500 A in CC mode	10–38 V in CV mode	450 A at 38 VDC, 100% Duty Cycle	57	29	23	22.6	21.0	80 VDC	H: 32½ in (826 mm) W: 23 in (585 mm) D: 38 in (966 mm)	376 lb (171 kg)
(#951 093) 230/460/575 V, Stationary Pkg				2.18*	1.04*	0.84*	0.87*	0.29*			
(#951 106) 230/460/575 V, MIGRunner Pkg											



XMT® Series

304 CC/CV and 456 CC/CV — See Literature No. DC/18.8
350 CC/CV, 350 MPa and 350 VS — See Literature No. DC/18.83

The proven “Best!” performer in portable multiprocess inverter applications.



Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and amount of contaminants pulled through machine.

Lift-Arc™ allows TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Inverter arc control technology provides greater puddle control for superior 6010 Stick electrode performance.

Line voltage compensation keeps power constant even if power input varies by ±10%. XMT 350 models further expand line voltage compensation to an amazing +37% and -59% when operating on 460 VAC.

Process selector switch reduces the number of control setup combinations without reducing any features.

Large, dual digital meters are easy to view and presettable to ease setting weld output.

Pulsed MIG with optional Optima™ control reduces spatter and distortion, allows better out-of-position puddle control, and provides potential reduction of fume particle emissions. *Optima control can be used with XMT CC/CV models only. Pulsed MIG is built-in on XMT 350 MPa and is not available on XMT 350 VS.*

Lightweight, aerospace-grade aluminum case offers protection with the benefit of reduced weight.

115 VAC auxiliary power provides 10 amps of circuit-breaker-protected power for water circulators, etc. *Standard on XMT 456 and optional on XMT 304, XMT 350 CC/CV and XMT 350 MPa. Not available on XMT 350 VS.*

*Additional packages are available, see page 51.

**Duty cycle rating below achieved with 6 gauge input power cord (8 gauge cord supplied with unit).

Heavy Industrial XMT 456 is 3-phase only.

Processes

- MIG (GMAW)
- Pulsed MIG (GMAW-P)*
- Stick (SMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons — 304: 1/4 in, 350: 5/16 in, 456: 3/8 in)

*XMT 350 MPa. XMT CC/CV models with optional control. Not available on VS model.

Most Popular Accessories for non-VS Models

- S-74 MPa Wire Feeder designed exclusively for XMT 350 MPa #300 411 (pg 51)
- SuitCase® RC Feeders (pg 40)
- Spoolmatic® 30A/WC-24 (pg 42)
- XR™-Control #181 538 (pg 43)
- 22A and 24A Feeders (pg 44)
- Optima™ MIG Pulse Control #043 389 (pg 78)
- Current Sensor (XMT 456 only) #194 807 (Field)

Most Popular Accessories for VS Model

- SuitCase® X-TREME™ VS (pg 39)
- Spoolmatic® 30A/WC-115A (with contactor) (pg 42)

Most Popular Accessories for all Models

- XMT® Rack (pg 55)
- Cylinder Cart #042 537 (pg 74)
- Universal Cart and Cylinder Rack (XMT 304/350 only) #042 934 (pg 74)
- MIGRunner™ Cart (XMT 304/350 only) #195 445 (pg 74)
- Running Gear Cylinder Rack (XMT 456 only) #300 408 (pg 74)
- Coolmate™ Coolant System (pg 76)
- Protective Cover (XMT 304/350 only) #195 478 (pg 81)
- Bernard® Q-Gun™

See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number*	Input Power	Amperage/Voltage Range	Rated Output	Amps Input at Rated Load Output, 60 Hz	Max. Open-Circuit Voltage	Dimensions	Net Weight
XMT 304 CC/CV (w/Dinse)	#(903 471) 208-230/460 V #(903 471-01-1) 208-230/460 V w/Aux. Pwr. #(903 473) 460/575 V #(907 061) 208/230/460 V MIGRunner w/22A	Three-Phase	CC Mode: 5–400 A CV Mode: 10–35 V	300 A at 32 VDC, 60% Duty Cycle	33.7 30.5 17 18.9 15.2 12.2 11.6	90 VDC	H: 17 in (432 mm) W: 12½ in (318 mm) D: 24 in (610 mm)	79.5 lb (36.1 kg)
		Single-Phase		225 A at 29 VDC, 60% Duty Cycle	52.4 47.4 — 24.5 — 11.3 7.6			
XMT 350 CC/CV (w/Dinse)	#(907 161) 208–575 V #(907 161-01-1) 208–575 V w/Aux. Pwr. #(907 233) 208–575 V MIGRunner w/22A #(907 423) 208–575 V MIGRunner w/S-74D	Three-Phase	CC Mode: 5–425 A CV Mode: 10–38 V	350 A at 34 VDC, 60% Duty Cycle	40.4 36.1 20.6 17.8 14.1 14.2 13.6	75 VDC	H: 17 in (432 mm) W: 12½ in (318 mm) D: 24 in (610 mm)	80 lb (36.3 kg)
		Single-Phase		300 A at 32 VDC, 60% Duty Cycle**	60.8 54.6 29.7 25.4 19.9 11.7 11.2			
XMT 350 MPa (w/Dinse)	#(907 366) 208–575 V #(907 366-01-1) 208–575 V w/Aux. Pwr. #(907 366-01-4) 208–575 V w/Tweco	Three-Phase	CC Mode: 5–425 A CV Mode: 10–38 V	350 A at 34 VDC, 60% Duty Cycle	40.4 36.1 20.6 17.8 14.1 14.2 13.6	75 VDC	H: 17 in (432 mm) W: 12½ in (318 mm) D: 24 in (610 mm)	80 lb (36.3 kg)
		Single-Phase		300 A at 32 VDC, 60% Duty Cycle**	60.8 54.6 29.7 25.4 19.9 11.7 11.2			
XMT 350 VS (w/Tweco®)	#(907 224) 208–575 V (CC/CV inverter ideal for construction — no remote control, order mating Tweco connectors separately)	Three-Phase	CC Mode: 5–425 A CV Mode: 10–38 V	350 A at 34 VDC, 60% Duty Cycle	40.4 36.1 20.6 17.8 14.1 14.2 13.6	75 VDC	H: 17 in (432 mm) W: 12½ in (318 mm) D: 24 in (610 mm)	80 lb (36.3 kg)
		Single-Phase		300 A at 32 VDC, 60% Duty Cycle**	60.8 54.6 29.7 25.4 19.9 11.7 11.2			
XMT 456 CC/CV (w/Stud ½")	#(907 010) 230/460 V #(907 010-01-1) 230/460 V w/Remote On/Off #(907 011) 575 V	Three-Phase	CC Mode: 5–600 A CV Mode: 10–38 V	450 A at 38 VDC, 100% Duty Cycle; 565 A at 43 VDC, 60% Duty Cycle	— 50.8 31 27.8 24.4 21.2 19.2	95 VDC	H: 17 in (432 mm) W: 14½ in (368 mm) D: 26 in (660 mm)	118 lb (53.5 kg)



XMT® 304 CC/CV Additional Features

Auto-Link® circuit automatically links the power source to primary voltage being applied (230/460 or 460/575 VAC, single- or three-phase).

Ultra-tough, polycarbonate-blended cover for control panel protects front controls from damage.

International-style weld disconnects provide high-quality weld cable connections. (Two connectors supplied with each unit.)

XMT® 350 Additional Features

CC/CV, MPa and VS models available. See MPa model below for built-in Pulsed MIG features. VS model is capable of both CV and CC operation, but has a simple four-position front panel *without remote control receptacle*. *Ideal for construction.*



Allows for any input voltage hook-up (208–575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Reduced OCV operation — an internal dip switch enables reduced open-circuit voltage Stick welding capability. OCV is typically below 15 volts.

Auto Remote Sense™ enables unit to automatically use remote control if connected to remote control receptacle (CC/CV and MPa models only).

Optional gas solenoid kit (#195 286) for TIG welding. Works with VS and non-VS models.

XMT® 350 MPa

Superior Pulsed MIG welding capabilities with simple-to-use multiprocess controls. Reliable inverter design combines with the SuitCase X-TREME feeders to provide the industry's "Best!" portable solution.



Multiprocess inverter with built-in Pulsed MIG

- Easy-to-use Pulsed MIG, including programs for exotic alloys
- Eliminates need for separate pulse control pendant or other pulse controls
- Pulsed MIG works with voltage sensing, remote control and benchtop wire feeders

MPa — MIG; Pulsed; advanced Arc Control. Easy-to-use advanced arc control enables an improved Pulsed MIG welding arc.

Built-in Pulsed MIG programs contain optimal parameters for steel, metal core, stainless, aluminum, nickel, silicon bronze and copper nickel wire. Just dial in wire and gas type. As easy to use as traditional MIG, the MPa's intuitive programming virtually eliminates the Pulsed MIG learning curve for experienced MIG operators.

SharpArc® controls the arc in Pulsed MIG mode and gives total control over the arc cone shape, puddle fluidity and bead profile.

S-74 MPa feeder and XMT 350 MPa system give you the benefit of Synergic Pulsed MIG. As you increase/decrease the wire feed speed, the pulse parameters increase/decrease, matching the right amount of power output to the wire speed.



XMT® 456 CC/CV Additional Features

Unique case design helps protect internal components from dirt and dust. To connect input power cord and/or set unit up for correct input power, remove the easy-to-handle panel (1/3 case). The remaining two-thirds of the case never needs to be removed!

Primary voltage display shows what primary voltage the power source is set for without removing the side panels. Saves time and assures you that the power source has been correctly set for available input voltage.

Optional 230/460 V model with remote on/off (#907 010-01-1) provides ability to turn power source on or off when it is located away from your work.

XMT® Packages



XMT 350 VS with SuitCase® X-TREME™ 8VS and Bernard® Q300 gun (#951 096)

Super portable MIG system plus Stick, TIG and CAC-A. Ideal for fabricating in tight quarters.



XMT 350 CC/CV with SuitCase® X-TREME™ 12VS and Bernard® Q300 gun (#951 099)

Portability with productivity in mind. 12-inch spool of wire will save trip to the tool crib, plus the power to lay down heavy metal.



XMT 350 MPa with SuitCase® 8RC and Bernard® Q300 gun (#951 079)
XMT 350 MPa with SuitCase® X-TREME™ 8VS and Bernard® Q300 gun (#951 081 not shown)

The Pulsed MIG process in the MPa provides the ultimate solution for shipbuilding and other applications requiring high quality, out-of-position welds on challenging materials. Choose the SuitCase 8RC or 12 RC for extra portability.



XMT 350 MPa with SuitCase® 12RC and Bernard® Q300 gun (#951 078)
XMT 350 MPa with SuitCase® X-TREME™ 12VS and Bernard® Q300 gun (#951 080 not shown)

The XR-Control and new XR-Aluma-Pro gun combine with the XMT 350 MPa to make a great Pulsed MIG system. Welding aluminum has never been easier.



XMT 350 MPa with XR™-Control and XR-Aluma-Pro™ Gun (#951 097)

XMT 304 and 350 CC/CV MIGRunner™

- XMT 304 MIGRunner™ w/22A (#907 061)
- XMT 350 MIGRunner™ w/22A (#907 233 shown)
- XMT 350 MIGRunner™ w/S-74D (#907 423)



Factory-complete welding packages are capable of housing two gas cylinders, optional water cooler, all in the most floor-space efficient, and maneuverable cart offered.

Note: Cart is for use with XMT 304/350 models only.



PipeWorx™ Welding System

See Literature
No. PWS/2.0

Designed for pipe fabrication shops.



Feeder
includes
drive rolls!



PipeWorx Welding System
(#951 131) shown. (Filler metal sold separately.)

Simple Process Setup

- The front panel was designed by welders for welders.
- Requires just a few basic steps to set up a new weld process, resulting in less training time and minimizing errors from incorrect setups.
- Memory feature stores 4 programs for each selection: Stick, DC TIG, and MIG (left and right side of feeder). Eliminates the need to remember parameters.

Multiprocess Machine

- Weld processes are optimized to deliver superior arc performance and stability specifically for root pass, fill and cap pipe welding.
- RMD™ and Pro-Pulse™.

Quick Process Changeover

- No need to manually switch polarity or cables and hoses between processes. Simply push a process selection button to choose a welding process. PipeWorx 'Quick-Select' technology automatically selects the welding process, the correct polarity, cable outputs and user programmed welding parameters.
- Quick process changeover eliminates set-up time for switching cables and gas hoses. Also, reduces the risk of weld reworks due to incorrect cable connection.

Streamlined System

- Wind Tunnel Technology™ and Fan-On-Demand™ provide system protection in the dusty shop environment.
- All system components have been selected to meet the needs of a pipe fabrication shop.

RMD™ (Regulated Metal Deposition)

— Precisely controlled short-circuit metal transfer process provides a calm, stable arc and weld puddle for less chance of cold lap or lack of fusion, less spatter and a higher quality root pass on pipe. The stability of the weld process lessens the need for puddle manipulation and is more tolerant to hi-lo conditions, reducing training requirements. Weld bead profiles are thicker than conventional root passes which can eliminate the need for a hot pass. In some stainless steel applications, it may be possible to eliminate the backing (purge) gas to further improve productivity and reduce welding costs.



RMD™ Carbon Steel

Pro-Pulse™ — Pulse welding method that provides a shorter arc length, narrower arc cone and less heat input than traditional spray pulse transfer. Process is synergic, virtually eliminating arc wander and variations in tip-to-work distances, providing easier puddle control and reducing training time. Also improves fusion and fill at the toe of the weld, for higher travel speeds and deposition. This process coupled with RMD for root passes permits procedures using the same wire and gas, eliminating process switch-over time.



Pro-Pulse Stainless

Heavy Industrial

Processes

- Stick (SMAW)
- DC TIG (GTAW) (HF and Lift-Arc™)
- MIG (GMAW)
- MIG RMD™ (GMAW MSC)
- Pro-Pulse™ (GMAW-P)
- Flux Cored (FCAW)

PipeWorx Welding System Comes Complete With

- Power source with cable hangers
- Running gear and handles
- Dual feeder with drive rolls
- Cable kit with 25 ft (7.6 m) work sense lead
- 15 ft (4.6 m) PipeWorx 250 and 300 guns

Most Popular Accessories

- Cable Kit #300 367
For feeder used on power source. Includes feeder cable, weld cable and 25 ft (7.6 m) work sense lead.
- Composite Cable Kit
25 ft (7.6 m) #300 454
50 ft (15.2 m) #300 456
For remote feeder applications. Includes either 25 or 50 ft composite cable which encases feeder cable, gas hose and weld cable in protective sheath, and either 25 or 50 ft work sense lead.
- PipeWorx Running Gear #300 368
Includes gas cylinder rack and handles.
- Feeder Cart #300 467
For remote feeder applications. Includes cable hangers and consumables drawer.
- PipeWorx Cooler #300 370
For MIG or TIG applications.
- Spool Cover #057 607
For single or left side of dual feeder.
- Spool Cover #090 389
For right side of dual feeder.
- DSS-9 Dual Schedule Switch #071 833
For changing weld parameters.
- RFCS-14 HD #194 744
Heavy-duty remote foot current/contact control.
- Bernard® PipeWorx™ Guns
15 ft (4.6 m) 250-15 #195 399
15 ft (4.6 m) 300-15 #195 400
15 ft (4.6 m) 400-15 #300 240

When purchasing components separately please see your Miller distributor or visit MillerWelds.com for other popular Miller options and accessories.

*Dimensions and weight are for power source only.

Stock Number	Welding Mode/Process	Amperage/Voltage Range	Rated Output at 100% Duty Cycle	Amps Input at Rated Output, 60 Hz, 3-Phase			KVA	KW	Max. Open-Circuit Voltage	Dimensions*	Net Weight*
				230 V	460 V	575 V					
(#951 131) 230/460 V (#951 132) 575 V PipeWorx Welding System	CC: Stick	40–350 A	350 A at 34 VDC	36.8	22.5	18.9	230 V 14.8 460 V 18.0 575 V 19.0	230 V 13.7 460 V 13.7 575 V 13.8	90 VDC	H: 28 in (711 mm) W: 19½ in (495 mm) D: 31¼ in (806 mm)	225 lb (102 kg)
	CC/DC: TIG	10–350 A	350 A at 34 VDC								
	CV: MIG/Flux Cored	10–44 V	400 A at 44 VDC	53.6	31.1	26	230 V 21.5 460 V 24.7 575 V 25.9	230 V 20.0 460 V 19.9 575 V 19.7			
(#907 382) 230/460 V (#907 384) 575 V Power source only											
PipeWorx Feeder Stock Number	Input Power	Wire Speed	Wire Diameter Capacity	Input Welding Circuit Rating			Maximum Spool Size Capacity	Dimensions	Net Weight		
(#300 365) Single-wire model (#300 366) Dual-wire model	24 VAC, 11 A	50–780 IPM (1.3–19.8 m/min)	.035–.062 in (0.9–1.6 mm)	100 V, 750 A at 100% Duty Cycle			60 lb (27 kg)	H: 14 in (356 mm) W: 19 in (483 mm) D: 29 in (737 mm)	Single: 65 lb (29.5 kg) Dual: 90 lb (41 kg)		



Multi-operator

Multioperator systems can save companies hundreds of thousands of dollars every year — is your company ready to be one of them? Learn more by going to MillerWelds.com/results and see how contractors, construction firms, shipyards and other heavy industrial companies improve results by switching to Miller multioperator systems.

MillerWelds.com/Multioperator



Product Guide

	Page	Class	Stick	MIG	MIG-P	DC TIG	DC TIG-P	Flux Core CAG-A (1-Unit)	Portability	Weldable Metals	Welding Output Range	Special Features	Typical Applications	
Mark VI™	54	●	●	●	●*	●	●	●	3/4"	Lift eye	Steel, stainless	20–315 A	Up to 6 operators	Construction, fabrication, pipe, shipbuilding
Mark VIII®-2	54	●	●	●	●	●	●	●	3/4"	Lift eye	Steel, stainless	35–300 A	Up to 8 operators	Construction, fabrication, pipe, shipbuilding
CST™ 280 Racks	55	●	●	●	●	●	●	●	5/16"†	Lift eye, optional running gear	Steel, stainless	5–280 A	Up to 4 or 8 operators, lightweight	Construction, maintenance/repair, shipbuilding
XMT® 304 Rack	55	●	●	●	●**	●	●**	●	1/4"	Lift eye, optional running gear	Steel, stainless	10–35 V 5–400 A	Up to 6 operators	Construction, fabrication, pipe, maintenance/repair
XMT® 350 CC/CV Rack	55	●	●	●	●**	●	●**	●	5/16"	Lift eye, optional running gear	Steel, stainless	10–38 V 5–425 A	Up to 6 operators	Construction, fabrication, pipe, maintenance/repair
XMT® 350 VS Rack	55	●	●	●	●	●	●	●	5/16"	Lift eye, optional running gear	Steel, stainless	10–38 V 5–425 A	Up to 6 operators	Construction, fabrication, pipe, maintenance/repair
XMT® 350 MPa Rack	55	●	●	●	●	●	●**	●	5/16"	Lift eye, optional running gear	Steel, stainless	10–38 V 5–425 A	Up to 6 operators	Construction, fabrication, pipe, maintenance/repair
Miller Du-Op™ (Engine Drive section)	67	●	●	●	●	●	●	●	3/8"	Lift eye, optional trailer	Steel, stainless	15–600 A	Multioperator engine drive	Construction, rental

3-Phase

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process
*CC/CV models only. **With optional controls. †Two machines paralleled. For more detailed information, see individual specification sheets.

Mark VI™

See Literature No. DC/9.8

Compact, multiple-operator systems supply a complete solution to your demanding multi-arc welding requirements. Four or six modules are available in one rugged steel enclosure.



Multiple capabilities CC or CC/CV. Versatility and outstanding arc welding performances in both CV (MIG) and CC (TIG and Stick). CC/CV module has a high quality arc for welding with cored wires. CC module has same great arc characteristic as the Gold Star® 302.

Four to six welding modules that can be paralleled for higher output.

Steel frame—weighs less than one ton, fits through 36 inch door.

Adjustable arc control prevents sticking electrodes. Electrode compensation circuit ensures arc control regardless of electrode size.

Line voltage compensation keeps output constant, even if primary input power varies by ±10%

14-pin receptacle provides quick, direct connection to Miller wire feeders and accessories.

Hot Start™ feature easily starts difficult electrodes.

Optional Low OCV modules reduce maximum open-circuit voltage to 26 volts in CC and CV modes when not welding.

Heavy Industrial

CC CV DC 3 Phase

Processes

- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (3/16 in carbons)
- Flux Cored (FCAW) and MIG Spray Transfer (GMAW) with voltage-sensing feeder
- MIG (GMAW) with CC/CV units

Most Popular Accessories

- SuitCase® X-TREME™ Wire Feeders (pg 39)
- RCC-14 Remote Control #151 086 (pg 82)
- RCCS-14 Remote Control #043 688 (pg 82)
- RFCS-14 Remote Control #043 554 (pg 82)
- RFCS-14 HD Remote Control #194 744 (pg 82)
- RHC-14 Remote Control #129 340 (pg 82)

See your Miller distributor for other popular Miller options and accessories.

Model	Stock Number	DC Amperage/ Voltage Range	Rated Welding Output at 44 VDC			Amps Input at 750 Amps Output 50/60 Hz	Max. Open-Circuit Voltage (DC)	Dimensions	Net Weight
			Single Module	Main Transformer	50/60 Hz				
Mark VI-2 (4 CC Modules)	(#903 588) 230/460/575 V, 60 Hz	20–315 A in CC mode	250 A at 60% Duty Cycle	1500 A at 25% Duty Cycle	750 A at 100% Duty Cycle	230 V 164 460 V 82.5 575 V 66.1 KVA 65.2 KW 41.9	75 VDC in CC mode	H: 65 in (1651 mm) W: 56¾ in (1442 mm) D: 34¼ in (870 mm)	Mark VI-2 Model: 1575 lb (718 kg) Mark VI Models: 1825 lb (828 kg)
Mark VI CC (6 CC Modules)	(#903 512) 230/460/575 V, 60 Hz	20–315 A in CC mode 10–30 V in CV mode	250 A at 60% Duty Cycle	1500 A at 25% Duty Cycle	750 A at 100% Duty Cycle		75 VDC in CC mode		
Mark VI CC/CV (6 CC/CV Modules)	(#903 645) 230/460/575 V, 60 Hz (#903 645-01-1) Low OCV Modules						38 VDC in CV Mode 26 VDC w/Low OCV modules		

Mark VIII®-2

See Literature No. DC/10.0

This durable, heavy-duty multiple-operator welding system drives eight modules from a single main transformer.



MagAmp Technology provides excellent arc and puddle control.

Eight modules driven by one transformer can be paralleled for higher output.

Remote control allows operators fine tuning at an extended distance. (Optional RHC-3 required.)

15 amp 115 VAC duplex receptacle allows operators the flexibility to run grinders, drills, coolers, etc. from power source.

Multiple capabilities — Stick, TIG, Air Carbon Arc cutting and gouging, and Flux Cored welding with a voltage-sensing feeder.

Rugged and durable steel frame.

Heavy Industrial

CC CV DC 3 Phase

Processes

- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (3/16 in carbons)
- Flux Cored (FCAW) and MIG Spray Transfer (GMAW) with voltage-sensing feeder

Most Popular Accessories

- SuitCase® X-TREME™ 8VS #300 093 (pg 39)
- SuitCase® X-TREME™ 12VS #195 500 (pg 39)
- RHC-3 Remote Control (pg 81)
20 ft (6 m) cord #040 056
100 ft (30 m) cord #195 354

See your Miller distributor for other popular Miller options and accessories.

Stock Number	DC Welding Amp Range, Single Module	Rated Output at 40 Volts		Amps Input at Rated Output of 800 A, 60 Hz					Max. Open-Circuit Voltage	Dimensions	Net Weight
		Single Model	Main Transformer	230 V	460 V	575 V	KVA	KW			
(#901 348) 230/460/575 V	35–300	200 A at 60% Duty Cycle	1600 A at 25% Duty Cycle, 800 A at 100% Duty Cycle	170	85	68	68	48.6	80	H: 70¼ in (1.8 m) W: 72 in (1.8 m) D: 40 in (1 m)	4050 lb (1837 kg)



CST™ 280 Racks

See Literature No. DC/18.82

Rugged enclosure provides simple means for protecting and transporting multiple welding power sources for construction, maintenance/repair and shipbuilding applications.



CST 280 8-Pack Rack shown.

- Light weight and small footprint for easy transportation. The low weight enables the use of elevators to move the rack.
- Top cover protects machines from falling debris.
- Lift eye simplifies crane or overhead lifting device transport.
- Lift truck fork pockets.
- One main disconnect box with branched fusing for each machine.
- Common output ground connection (for same polarity use only).
- Optional dual rack kit connects two 4-pack CST racks to form an 8-pack rack, utilizing one input power cable and one lift.
- Optional rack running gear available for transporting the rack.

Heavy Industrial ● CC DC 3 Phase

Processes

- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Paralleled CST-280s: 5/16 in carbons)

Most Popular Accessories

- Dual Rack Kit #195 267



- 4-Pack Rack Running Gear #195 114
- 8-Pack Rack Running Gear #195 436

Model/Stock Number	Rack Capacity	Input Power to Rack	Welding Power Source	Dimensions	Net Weight
4-Pack Rack (#907 247) Tweco®-style (#907 245) Dinse-style	4 units, 8 units with optional dual rack kit	220-230/460-575 V, 60 Hz, Three-Phase	CST 280s linked for 460-575 V with Tweco- or Dinse-style connectors. The Dinse-style includes one set of male connectors; the Tweco-style does not. See pg 14 for information on CST 280.	H: 50 3/4 in (1289 mm) W: 25 1/2 in (648 mm) D: 26 1/2 in (673 mm)	355 lb (161 kg)
8-Pack Rack (#907 365) Tweco®-style	8 units			H: 50 3/4 in (1289 mm) W: 46 in (1168 mm) D: 26 1/2 in (673 mm)	640 lb (290 kg)
Empty Rack (#195 051)	4 units	—	Can contain any CST models.	Same as 4-Pack Rack	166 lb (75 kg)

XMT® 304 and 350 Racks

See Literature No. DC/18.81, DC/18.8 and DC/18.83

XMT Rack conveniently houses multiple inverter power sources for multiple welders. This is an ideal system for onsite applications including construction and shipbuilding.



XMT 350 Rack shown.

- Both 4-rack and 6-rack models are available with two lift eyes for transportation and rugged skids for dragging or pushing.
- Custom build your own system by mix and matching Miller's XMT® 304 CC/CV, 350 CC/CV, 350 MPa, 350 VS and 456 CC/CV; and Invision™ 350 MPa, 456MP and 456P. (XMT® 456 CC/CV, Invision™ 456MP and 456P— maximum of 4 units.)
- One easy connection allows up to six inverters to be connected with one primary power drop.
- Isolated work terminal provides a connection point for common workpiece construction.
- XMT 304 Rack — fuses provide primary power line protection for each inverter power supply.
- XMT 350 Rack — operates with primary voltage from 208 to 575 VAC and is equipped with "finger safe" fuses to help comply with NEC guidelines.

Heavy Industrial ● CC CV DC 3 Phase

Processes

- MIG (GMAW)
- Pulsed MIG* (GMAW-P)
- Stick (SMAW)
- TIG and Lift-Arc TIG (GTAW)
- Pulsed TIG* (GTAW-P)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (XMT 304: 1/4 in carbons) (XMT 350: 5/16 in carbons) (XMT 456: 3/8 in carbons)

*With optional controls only — not available with XMT 350 VS model.

Note: TIG processes not available with Invision models.

Most Popular Accessories

- Rack Running Gear #195 114
- Fuse Kits
XMT 304/350 (20 A, 460–575 V)
4-Pk #220 766/6-Pk #220 765
XMT 304/350 (45 A, 208–230 V)
4-Pk #220 764/6-Pk #220 763
XMT 456 (30 A, 460–575 V)
4-Pk #220 767

*More models are available — see our Web site or Literature No. DC/18.81, DC/18.8 and DC/18.83.

Model/Stock Number	Welding Power Source	Input Power to Rack	Dimensions	Net Weight
XMT 304 Rack (#907 292)	XMT 304 CC/CV (4 Units with Dinse)	230/460 VAC, 60 Hz, Three-Phase (20 A fuses included)	H: 59 3/8 in (1508 mm) W: 43 in (1092 mm) D: 34 3/8 in (873 mm)	560 lb (254 kg)
XMT 350 Rack (#907 228)	XMT 350 VS (6 Units with Tweco)	208–575 VAC, 50/60 Hz, Three-Phase (20 A fuses included)		599 lb (272 kg)
XMT 350 Rack (#907 231)	XMT 350 CC/CV (4 Units with Dinse)			759 lb (344 kg)
XMT 350 Rack (#907 232)	XMT 350 CC/CV (6 Units with Dinse)			759 lb (344 kg)
XMT 350 Rack (#907 407)	XMT 350 CC/CV (4 Units with Tweco)			759 lb (344 kg)
XMT 350 Rack (#907 406)	XMT 350 CC/CV (6 Units with Tweco)			759 lb (344 kg)
XMT 350 Rack (#907 410)	XMT 350 MPa (4 Units with Tweco)			759 lb (344 kg)
XMT 350 Rack (#907 411)	XMT 350 MPa (6 Units with Tweco)			759 lb (344 kg)
Empty Rack (#195 466)	XMT 304 or 350, Invision 350 MPa (6 Units); XMT 456 CC/CV, Invision 456 (4 Units)	(Order required fuse kit separately)	279 lb (127 kg)	



Engine-Driven

Miller's reliable engine drives help you get more work done, plus they were designed with truck-mounted applications in mind—and the feature-packed new Trailblazer® Air Pak™ and economical Wildcat® are no exception! Visit the Engine Drive section at MillerWelds.com, or visit MillerWelds.com/truck to learn more.



MORE on the WEB

MillerWelds.com/EngineDriven

Product Guide

	Page	Class	Stick	MIG	AC TIG	DC TIG	Flux Core*	PAC**	CAC-A	Portability	Weldable Metals	Std. Generator Power (Phase/Watts)	Welding Amperage Range	Engine Brand	Special Features	Typical Applications
Gas	Renegade™ 180	57	●	●			●	●		Running gear, optional lift eye	Steel, alum, stainless	1-Phase/5000	30–180 DC	Kohler	Portable wire welder	Maintenance, farm/ranch, hobbyist
	Blue Star® 145	58	●	●		●	●			Optional lift eye, running gear	Steel	1-Phase/4500	40–145 DC	Kohler	Compact, portable	Maintenance, service trucks
	Blue Star® 185	58	●	●		●	●				Steel	1-Phase/6000	55–185 DC	Honda, Kohler	Compact, portable	Maintenance, service trucks
	Wildcat® 200	58	●	●		●	●			Lift eye, pickup mount, optional running gear,	Steel	1-Phase/6500	50–200 DC	Subaru	Compact, lightweight	Maintenance, repair
	Bobcat™ 225	60	●	●	●	●	●	●			Steel, alum, stainless	1-Ph/10,500 (K) 1-Ph/11,000 (S)	50–225 AC 50–210 DC	Kohler (K), Subaru (S),	Cost-effective AC/DC Stick	Maintenance, farm, construction
	Bobcat™ 3 Phase	57	●	●	●	●	●	●	3/16"			1-Phase/10,500 3-Phase/11,000	50–225 AC 50–210 DC	Kohler	Backup power for pivot irrigation	Farm/ranch
	Bobcat™ 250	61	●	●	●	●	●	●	3/16"			1-Phase/11,000	40–250 CC 90–275 CV	Kohler, Subaru	Contractor's choice, AC/DC Stick, strong FCAW	Fab, maintenance, farm, construction
	Miller Legend® 302	57	●	●	●	●	●	●	3/16"		Steel, stainless	1-Phase/5500	10–300 DC	Kohler	Quiet, low-speed, fuel efficient	Service/maintenance, in-plant, construction
	Trailblazer® 275 DC	62	●	●	●	●	●	●	3/16"		Steel, alum, stainless	1-Phase/11,000	10–275 DC	Kohler, Subaru	Pro's choice, premium arc quality	Fab, structural, maintenance, repair, piping
	Trailblazer® 302	62	●	●	●	●	●	●	3/16"		Steel, alum, stainless	1-Phase/11,000	30–225 AC 10–325 DC	Kohler, Subaru	Pro's choice, premium arc quality	Fab, structural, maintenance, repair, piping
Trailblazer® 302 Air Pak™	63	●	●	●	●	●	●	3/16"		Steel, alum, stainless	1-Phase/12,000	30–225 AC 10–350 DC	Kohler	AC/DC, CC/CV, 26 CFM air, battery charge/jump start	Service, repair, construction	
Diesel	Bobcat™ 250 Diesel	61	●	●	●	●	●	●	3/16"	Lift eye, optional running gear, trailer	Steel, alum, stainless	1-Phase/11,000	40–250 CC 90–275 CV	Kubota	Contractor's choice, AC/DC Stick, strong FCAW	Fab, maintenance, farm, construction
	Trailblazer® 302 Diesel	62	●	●	●	●	●	●	3/16"		Steel, alum, stainless	1-Phase/11,000	30–225 AC 10–325 DC	Kubota	Pro's choice, premium arc quality	Fab, structural, maintenance, repair, piping
	PipePro™ 304	67	●	●	●	●	●	●	1/4"	Lift eye, pickup mount, optional trailer	Steel, stainless	1 or 3-Ph/12,000	5–400 DC	Kubota	XMT 304 arc characteristic	Pipe, structural
	PRO 300	65	●	●	●	●	●	●	1/4"		Steel, stainless	1-Phase/12,000	20–410 DC	Caterpillar, Deutz	Low-speed engine, compact, rugged, quiet	Pipe, structural, construction
	Big 40®	66	●	●	●	●	●	●	5/16"	Lift eye, generally mounted on optional trailer	Steel, alum, stainless	1-Phase/5500	20–500 DC	Caterpillar	AC/DC on Deluxe model	Construction, rental
	Big Blue® 400	66	●	●	●	●	●	●	5/16"		Steel, stainless	1-Phase/5500	20–500 DC	Deutz, Perkins	Engine & process choice	Offshore, construction, rental
	Big Blue® 500	66	●	●	●	●	●	●	3/8"		Steel, stainless	1-Phase/5500	20–650 DC	Deutz, Perkins	Engine & process choice	Offshore, construction, rental
	Miller Du-Op®	67	●	●	●	●	●	●	1/2"		Steel, stainless	1-Phase/5500	15–600 DC	Deutz	Multioperator engine drive	Construction, rental
	Big Blue® Turbo	68	●	●	●	●	●	●	3/8"		Steel, stainless	1-Phase/5500	20–750 DC	Deutz	Turbo for high altitude	Construction, mining
	Big Blue® Air Pak™	68	●	●	●	●	●	●	1/2"		Steel, alum, stainless	1-Phase/5500	20–750 DC	Deutz	AC on Deluxe model	Repair, mining, railroad

Why buy a GAS or DIESEL engine?

Gas Advantages

- Lower product cost — 50 to 70% lower
- Smaller size and less weight — uses less space and a smaller truck can be used
- Less expensive engine repairs and better warranties — longer and unlimited hours
- Gas is most common fuel supply and costs less than diesel fuel
- Easier cold weather starting

Diesel Advantages

- Uses 20 to 40% less fuel
- 1-1/2 to 2-1/2 times the engine life
- Required on some job sites for safety
- Typically longer maintenance intervals
- Convenient if other equipment is primarily diesel

PRODUCT KEY

CLASS: ● Light Industrial ● Industrial ● Heavy Industrial CAPABILITY: ● Designed for this process ● Capable of this process
 New! or improved! products appear in blue type. *If using self-shielded wire, use CV weld output. **With appropriate Spectrum, see engine-driven product descriptions.
 For more detailed information, see individual specification sheets.



Renegade™ 180

See Literature No. ED/2.7



Industry-first integrated wire welder/generator!



Integrated wire welder features durable cast aluminum feedhead, plastic hub with retaining ring, polarity changeover terminals, spring-loaded tension arm, and calibrated tension knob.

with retaining ring, polarity changeover terminals, spring-loaded tension arm, and calibrated tension knob.

- **Dual power (patented)** provides the flexibility to weld from 230 V shop power to eliminate fuel costs or use engine power for maximum portability.
- **Compact and portable with standard one-man running gear.**
- **Premium gas engine drive in recoil or electric start.**
- **Generator has Accu-Rated™, not inflated, 5000 watts peak power and provides both 120 V and 240 V power.**

Light Industrial ● CV DC 1 Phase

Processes

- MIG (GMAW) • Flux Cored (FCAW)

Gasoline Engine Kohler CS10

1-cylinder, 4-cycle, OHV, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Comes Complete With

- Running gear
- 12 ft (3.7 m) M-15 MIG gun
- 10 ft (3 m) work cable with clamp
- Power cord with plug
- Factory-installed contactor and gas solenoid valve
- Dual groove drive roll
- Extra contact tips, Hobart® spool of flux cored wire, information/settings chart, and setup and operation CD

See distributor for Miller accessories.

Gasoline	Stock Number	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz	Wire Feed Speed	Single-Phase Generator Power	Dimensions (with running gear)	Net Weight
	(#907 345) Kohler Recoil Start, 10 HP at 3600 RPM (#907 395) Kohler Electric Start, 10 HP at 3600 RPM	30-180	135 A at 22.5 V, 30% Duty Cycle	230 V: 19.5 KVA: 4.5 KW: 3.8	20-700 IPM (0.5-17.8 m/min) 40-720 IPM at no load (1.0-18.3 m/min)	Peak: 5000 watts Continuous: 4500 watts, 34 A at 120 V, 17 A at 240 V	H: 31 in (787 mm) W: 32 in (813 mm) D: 41 in (1041 mm)	275 lb (125 kg)

Bobcat™ 3 Phase

See Literature No. ED/4.33



Designed for farm and ranch owners in need of single- and three-phase power to run 480 V three-phase pivot irrigation systems or to provide backup power for home, farm and ranch.

- **Accu-Rated™ 11,000 watts of 3-phase (480 V) or Accu-Rated 10,500 watts of 1-phase (120/240 V) power.**
- **Maintenance displays, fully enclosed case, fuel gauge and LP option.**
- **Welding and power ratings are at 104° F (40° C).**
- **Bobcat 3 Phase is a 11,000 watt generator with Bobcat 225 weld output.**

*LP Tank Mounting Assembly (pg 76) sold separately. Tank not included.

Industrial ● CC CV AC DC

Processes

- Stick (SMAW) • DC TIG (GTAW)
- MIG/Flux Cored (GMAW/FCAW)*
- AC TIG (AC GTAW)**

*With voltage-sensing feeder only.

**With Dynasty® 200 Series or HF-251 (non-critical).

Engines

Gasoline: Kohler CH 23

LP: Kohler CH 730

Twin-cylinder, 4-cycle, OHV, industrial, air-cooled

Note: Engines are warranted separately by engine manufacturer.

See distributor for Miller accessories.

Gasoline	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Generator Power	Dimensions	Net Weight
	(#907 255) Kohler 23 HP at 3600 RPM	CC/AC	Stick/TIG	50-100 A	225 A at 25 V, 100% Duty Cycle	1-Phase Peak: 10,500 watts; Continuous: 9500 watts 84/42 A, 120/240 VAC, 60 Hz	H: 33 in (838 mm) W: 20 in (508 mm) D: 45 1/2 in (1156 mm)	540 lb (245 kg)
		CC/DC		70-150 A				
LP*	(#907 255-01-1) Kohler 25 HP at 3600 RPM	CV/DC	MIG/FCAW	19-28 V	200 A at 20 V, 100% Duty Cycle	3-Phase (480 V) Peak: 11,000 watts; Continuous: 10,000 watts, 13 A, 480 VAC		

Miller Legend® 302

See Literature No. ED/4.2



Low RPM generator power and weld speeds make this air-cooled engine drive unique. Great for service/maintenance trucks, in-plant use, and construction (especially in residential areas).

- **EXCLUSIVE! 1800 RPM generator power.**
- **EXCLUSIVE! Multi-speed weld output.**
- **Premium multiprocess weld performance.**
- **Standard 14-pin receptacle.**
- **Past Legend and current Trailblazer features combine to make unit a perfect choice for low-speed generator use, running large diameter wire using a voltage-sensing feeder, or almost everything in between.**

*More models are available — see our Web site or Literature No. ED/4.2.

Heavy Industrial ● CC CV DC

Processes

- Stick (SMAW) • DC TIG (GTAW)
- MIG/Flux Cored (GMAW/FCAW)*
- Air Carbon Arc Cutting and Gouging (CAC-A) (3/16 in carbons)

*With voltage-sensing feeder only.

Gasoline Engine Kohler CH 23

V-twin-cylinder, 4-cycle, OHV, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

See distributor for Miller accessories.

Gasoline	Stock Number*	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Single-Phase Generator Power	Dimensions	Net Weight
	(#907 272) Kohler 23 HP, 1800/3000 RPM, 2400/3600 RPM	CC/DC	Stick/TIG	10-300 A	280 A at 25 V, 100% Duty Cycle	Peak: 5500 watts at 1800 RPM, 60 Hz Continuous: 5000 watts at 1800 RPM, 42/21 A, 120/240 VAC, 60 Hz At all speeds: 2400 watts, 20 A, 120 V, 60-120 Hz	H: 33 in (838 mm) W: 20 in (508 mm) D: 45 1/2 in (1156 mm)	580 lb (263 kg)
		CV/DC		MIG/FCAW				



Blue Star® 145 and 185

See Literature No. ED/2.5

Reliable power when size matters! Great for farm, ranch, maintenance, construction and hobbyist.



Blue Star 145

Blue Star 185 DX

Compact and portable, its small footprint uses little truck space. Optional running gear also makes the Blue Star one-man portable.

Large 5-gallon fuel capacity (DX models) leads its class. Longer run time for welder or generator usage.

Single-range amperage control makes setting amperage levels easy.

Receptacle covers improve reliability by protecting receptacles from debris.

Light Industrial ● **CC DC**

Processes

- Stick (SMAW)
- TIG (GTAW)

Gasoline Engines

Kohler CS10: Blue Star 145/145DX

Honda GX390: Blue Star 185

Kohler CS12.75: Blue Star 185 DX 1-cylinder, 4-cycle, overhead valve, air-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- Millermatic® 140 Auto-Set™ #907 335 (pg 25)
- Millermatic® 180 Auto-Set™ #907 312 (pg 25)
- No. 38 Running Gear #195 352 (pg 75)
- Lifting Eye #195 353 (pg 76)
- Protective Cover #195 193 (pg 77)
- No. 2 Stick Cable Set (pg 81)

See your Miller distributor for other popular Miller options and accessories.

*More models are available—see our Web site or Literature No. ED/2.5.

Gasoline	Model	Stock Number*	Welding Mode/Process	Amperage Range	Rated Output	Single-Phase Generator Power	Dimensions	Net Weight
	Blue Star 145	(#907 266) Kohler Recoil Start, 10 HP at 3600 RPM	CC/DC (Stick/TIG)	40–145	145 A at 25 V, 20% Duty Cycle; 100 A at 25 V, 60% Duty Cycle	Peak: 4500 watts Continuous: 4000 watts, 34 A at 120 V, 17 A at 240 V	H: 22¾ in (578 mm) W: 22¾ in (578 mm) D: 31¾ in (803 mm)	263 lb (119 kg) 309 lb (140 kg)
	Blue Star 145 DX	(#907 267) Kohler Electric Start, 10 HP at 3600 RPM	CC/DC (Stick/TIG)	40–145	145 A at 25 V, 20% Duty Cycle; 100 A at 25 V, 60% Duty Cycle	Peak: 4500 watts Continuous: 4000 watts, 34 A at 120 V, 17 A at 240 V	H: 22¾ in (578 mm) W: 22¾ in (578 mm) D: 31¾ in (803 mm)	263 lb (119 kg) 309 lb (140 kg)
	Blue Star 185	(#907 268) Honda Recoil Start, 13 HP at 3600 RPM	CC/DC (Stick/TIG)	55–185	185 A at 25 V, 20% Duty Cycle; 130 A at 25 V, 60% Duty Cycle	Peak: 6000 watts Continuous: 5500 watts, 40 A at 120 V, 23 A at 240 V	H: 22¾ in (578 mm) W: 22¾ in (578 mm) D: 31¾ in (803 mm)	267 lb (121 kg) 315 lb (143 kg)
	Blue Star 185 DX	(#907 269) Kohler Electric Start, 12.75 HP at 3600 RPM	CC/DC (Stick/TIG)	55–185	185 A at 25 V, 20% Duty Cycle; 130 A at 25 V, 60% Duty Cycle	Peak: 6000 watts Continuous: 5500 watts, 40 A at 120 V, 23 A at 240 V	H: 22¾ in (578 mm) W: 22¾ in (578 mm) D: 31¾ in (803 mm)	267 lb (121 kg) 315 lb (143 kg)



Wildcat® 200

See Literature No. ED/3.0

Compact, lightweight, durable and cost effective machine is designed for the contractor and is great for maintenance/repair, farm and ranch applications.



Fully enclosed durable case provides a fully protected engine to ensure long-term engine reliability.

Accu-Rated™ 6500 watts of usable peak power cranks out enough power for many construction, maintenance/repair, and farm/ranch applications. 5500 watts of continuous power.

12 hours of run time is provided by a 7-gallon fuel tank when using a typical 1/8 in Stick electrode.

Tested and rated at 104° F (40° C) to ensure consistent operation of the welder and generator in all climates.

Heavy duty construction ensures protection from rough handling or the elements to keep you making money, rather than spending it.

Time is money. This lightweight, durable machine is easy to move around and provides enough welding/generating output to suit most job site needs.

Dependable, compact, and lightweight Subaru 14 HP engine provides a three-year warranty that ensures reliability and peace of mind for years after the purchase.

Light Industrial ● **Industrial** ● **CC DC**

Processes

- Stick (SMAW)
- TIG (GTAW)

Gasoline Engine

Subaru EX40

1-cylinder, 4-cycle, overhead cam, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- Spectrum® 375 X-TREME™ Plasma Cutter #907 339 (pg 8)
- Millermatic® 140 Auto-Set™ #907 335 (pg 25)
- Millermatic® 180 Auto-Set™ #907 312 (pg 25)
- Running Gear #300 532 (pg 75)
- Protective Cover #300 496 (pg 77)

See your Miller distributor for other popular Miller options and accessories.

*More models are available—see our Web site or Literature No. ED/3.0.

Gasoline	Stock Number*	Welding Mode/Process	Amperage Range	Rated Output	Single-Phase Generator Power	Dimensions	Net Weight
	(#907 403) Subaru 14 HP at 3600 RPM	CC/DC (Stick/TIG)	50–200	150 A at 25 V, 100% Duty Cycle; 200 A at 25 V, 20% Duty Cycle	Peak: 6500 watts Continuous: 5500 watts, 54 A at 120 V, 27 A at 240 V, 60 Hz	H: 24¾ in (629 mm) W: 20 in (508 mm) D: 35½ in (902 mm)	345 lb (159 kg)

Choose the Right Gas Engine Drive

Wildcat® 200



NEW!

UPGRADE

Bobcat™ 225



UPGRADE

Bobcat™ 250



UPGRADE

Trailblazer® 275 DC



UPGRADE

Trailblazer® 302



Product Description

Compact, lightweight, durable, and cost-effective machine is designed for contractors, maintenance/repair, and farm and ranch applications.

Cost-effective, multiprocess machine primarily used for Stick is great for farm, ranch, stand-alone generator, and maintenance/repair operations.

Rugged engine drive is great for Stick and Flux Cored welding and is designed for maintenance/repair operations, construction, farm, ranch and generator use.

Unbeatable Stick, wire, and DC TIG arc performance and the two generator system is ideal for construction, fabrication, and maintenance/repair operations.

High output, unbeatable arc performance, and the two generator system make this perfect for construction, fabrication, and maintenance/repair operations.

Weld Performance

Stick	Very Good	Very Good	Very Good/Excellent	Excellent	Excellent
MIG – Wire (Solid/FCAM), Steel	See Accessories below	Fair	Good	Excellent	Excellent (325 Amps)
MIG – Wire, Aluminum w/Spool Gun	—	Fair	Good	Excellent	Excellent (325 Amps)
TIG – DC, Steel	Good	Good	Very Good	Excellent	Excellent
TIG – AC, Aluminum w/H.F.*	—	Fair	Fair/Good	Not Available	Very Good

Generator

Watts	6,500	Kohler: 10,500 Subaru: 11,000	11,000	11,000	11,000
Power Quality	Good/Very Good	Very Good/Excellent	Very Good/Excellent	Very Good/Excellent	Very Good/Excellent
Power White Welding	Fair With voltage control set near maximum	Fair/Good With voltage control set near maximum	Good Easier to fine tune arc with voltage control near maximum	Excellent	Excellent Two generator system: one for generating power — no interaction between tools and the welding arc.

Key Features

Fuel Capacity	7 gallon	12 gallon	12 gallon	12 gallon	12 gallon
Sound Levels at 23 ft (7 m)	82.3 dB	75.5 dB (1/3 less noise)	75.5 dB (1/3 less noise)	75.5 dB (1/3 less noise)	75.5 dB (1/3 less noise)
Digital Meters with SunVision™	No	No	No	Yes	Yes
Stick: DIG/Adaptive Hot Start™	No	No	No	Yes	Yes
Maintenance Displays	Hours	Hours/Oil Change	Hours/Oil Change/Fuel	Hours/Oil Change/Fuel/RPMs	Hours/Oil Change/Fuel/RPMs
Polarity Switch	No	Yes	Yes	No	Yes
14-pin Remote Receptacle	No	No	No	Yes	Yes

Accessories

Wire Feeders	—	SuitCase® VS**	SuitCase® VS**	SuitCase® VS and RC**	SuitCase® VS and RC**
Spool Guns	—	Spoolmate™ 3035/SGA 100C	Spoolmatic® 30A/WC-115A	Spoolmatic® 30A/WC-24	Spoolmatic® 30A/WC-24 (325 Amps)
MIG (All-In-One), Plug-In	Millermatic® 180 and smaller	Millermatic® 212 and smaller	Millermatic® 212 and smaller	Millermatic® 212 and smaller	Millermatic® 212 and smaller
TIG (AC/DC), Plug-In	Dynasty® 200	Dynasty® 200	Dynasty® 200	Dynasty® 200	Dynasty® 200
Plasma Cutters	Spectrum® 375 X-TREME™	Spectrum® 2050 and smaller	Spectrum® 2050 and smaller	Spectrum® 2050 and smaller	Spectrum® 2050 and smaller

*High Frequency Arc Starter and Stabilizer **VS = Voltage Sensing Feeder, RC = Remote Control Feeder





Bobcat™ 225

See Literature No. ED/4.4

Cost-effective, multiprocess machine primarily used for Stick is great for farm/ranch, stand-alone generator, and maintenance/repair operations.



Improved!

Fully Enclosed!

Toughest Welders...



NEW! Fully enclosed case provides reduced sound levels and fully protects the engine.

NEW! Reduced sound level — 1/3 less noise than previous models. Quietest in its class.

Maintenance displays show engine hours and hours left before an oil change is due.

Accu-Rated™ 10,500 watts of usable peak power cranks out enough power for most applications: job site, farm/ranch, or home. 9500 watts of continuous power.

Note: Kohler=10,500 W, Subaru=11,000 W.

Ten-degree skewed-rotor design for smoother generator power — better power, better performance.

Fuel capacity of 12 gallons means many hours of run time before refueling.

EXCLUSIVE! Super-tough protective armor with covers has high-impact resistance in all temperatures and is chemical-resistant. Other applications include: automotive bumpers, tractor hoods and panels, lawn mower decks, large structural parts, etc.

Output stud and receptacle covers are required by OSHA and CSA for job site safety.

Welding and power ratings are at 104° F (40° C) — highest in its class to ensure reliable performance.

Choose from the industry's highest quality engines — Subaru or Kohler gas engines are overhead valve, quiet, fuel efficient and durable.

Heavy-duty construction. All internal components are designed to handle the harshest environments and will run better and last longer.

Typical Equipment Power Usage

Bobcats and Trailblazers will easily start and run the following equipment:

Farm Equipment	Starting Watts	Running Watts
Barn cleaner (5 HP)	11,600	3000
Silo unloader (5 HP)	12,200	4300
Portable conveyer (1/2 HP)	3400	1000
Milker (5 HP)	10,500	2800
Contractor Tools		
Hand drill (1/2 in)	600	600
Circular saw (8 1/4 in)	1400	1400
Air compressor (1 1/2 HP)	8200	2200
Flood lights (vapor)	1250	1000
Household		
Refrigerator/freezer	2200	700
Sump pump	1300	800
Welding/Cutting Equipment		
Millermatic® 212 Auto-Set™ MIG welder, 230 V	6500	6500
Spectrum® 625 X-TREME™ 30 A, 230 V, 1/2 in cut	6900	6900

*More models are available — see our Web site or Literature No. ED/4.4. See Wildcat/Bobcat/Trailblazer performance comparison chart on page 59.

Industrial ● CC CV AC DC

Processes

- Stick (SMAW)
- MIG (GMAW)*
- Flux Cored (FCAW)*
- AC**/DC TIG (GTAW)

*With voltage-sensing feeder only.
**With Dynasty® 200 Series or HF-251 (non-critical).

Gasoline Engines

Kohler CH 23 or Subaru EH 65

V-twin-cylinder, 4-cycle, overhead valve, industrial, air-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- Spectrum® Plasma Cutters
- 375 X-TREME™ #907 339 (pg 8)
- 625 X-TREME™ #907 404 (pg 8)
- Dynasty® 200 Series (pg 18)
- SuitCase® X-TREME™ Wire Feeders (pg 39)
- All-Purpose Running Gear (pg 75)
- #300 396 with Inner Tubes
- #300 477 with Never Flat™ tires



- **Protective Cage with Cable Holders #195 331** (works with Running Gear, Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly on pages 75/76)
- Adapter Cord, Full KVA #300 158 (pg 76)
- 1-Phase Full KVA Plug Kit #119 172 (pg 76)
- Remote Oil Drain/Filter Kits (pg 77)



- **Protective Cover #195 333 (pg 77)** (for use without Running Gear or Protective Cage)
- Protective Cover #195 529 (pg 77) (for use with Running Gear)
- HWY-1000 Trailer #195 013 (pg 77)
- HF-251D-1/Secondary Contactor #042 388/#041 969 (pg 81)
- Engine Tune-up Kits are available from your Miller parts distributor.

See your Miller distributor for other popular Miller options and accessories.

Gasoline	Stock Number*	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Single-Phase Generator Power	Dimensions	Net Weight
	#907 209 Kohler 23 HP at 3600 RPM	CC/AC	Stick/TIG	50–100 A	225 A at 25 V, 100% Duty Cycle	Peak: Kohler=10,500 watts Subaru=11,000 watts; Continuous: 9500 watts	H: 28 in (711 mm) H: 33 in (838 mm) to top of exhaust W: 20 in (508 mm) D: 45 1/2 in (1156 mm)	530 lb (240 kg)
		CG/DC		70–150 A	210 A at 25 V, 100% Duty Cycle			
#907 210 Subaru 23 HP at 3600 RPM	CV/DC	MIG/FCAW	85–225 A (210 DC)	200 A at 20 V, 100% Duty Cycle	84/42 A, 120/240 VAC, 60 Hz			

Bobcat™ 250 (Gas, LP or Diesel)

See Literature No. ED/4.4

Rugged engine drive is great for Stick and Flux Cored welding and is designed for maintenance/repair operations, construction, farm/ranch, and generator use.



The industry's most popular engine drive!

Bobcat 250 gas engine drive shown.

Typical Equipment Power Usage (see page 60)

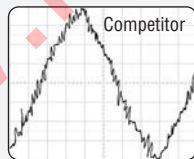
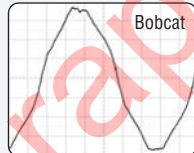
Accu-Rated™ — Not Inflated Generator Power

Miller's Accu-Rated™ 11,000 watts of usable peak power is delivered for a minimum of 30 seconds. Accu-Rated means peak power is usable for maximum generator loads such as plasma cutting, Millermatics® and motor starting. Accu-Rated peak power beats the competition's very short-duration peak or surge power. Use your peak power, it's more than a number.



Smooth Power — Not Spike Power

Revolutionary ten-degree skewed-rotor design optimizes generator performance for smoother power — not spiked power found with other brands. Better power — better performance.



Waveform Comparison

Toughest Welders...



Fully enclosed case provides reduced sound levels, fully protected engine, and utilizes the same hole-mounting pattern as past models.

Reduced sound level — 1/3 less noise than previous models. Quietest in its class.

Tri-Cor™ Technology is a redesigned stabilizer with added iron core for smoother weld output, improved performance and decreased spatter with 7018 electrodes. All without sacrificing the already excellent performance with 6010 electrodes.

Fuel capacity of 12 gallons means many hours of run time before refueling.

EXCLUSIVE! Super-tough protective armor w/covers has high-impact resistance in all temperatures and is chemical-resistant. Other applications include: automotive bumpers, tractor hoods and panels, lawn mower decks, large structural parts, etc.

Output stud and receptacle covers are required by OSHA and CSA for job site safety.

Removable service doors provide easy access for engine maintenance.

Welding and power ratings are at 104° F (40° C) — highest in its class to ensure reliable performance. Most service managers and technicians recommend the Bobcat over any other machine.

Meter maintenance displays:

- Hour meter function
- Oil change interval
- Fuel gauge
- Diesel: High coolant temperature and low oil pressure shutdowns
- Diesel: Low fuel shutdown — engine shuts down before system runs out of fuel making restarts easy

Idle lock switch allows engine to be started at idle to extend engine life (diesel).

Industrial ● Heavy Industrial ●

CC CV AC DC

Processes

- Stick (SMAW)
 - MIG (GMAW)*
 - Flux Cored (FCAW)*
 - AC**/DC TIG (GTAW)
 - Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons—rated 3/16 in and capable 1/4 in)
 - Optional Battery Charger (replaces AC weld output)
- *With voltage-sensing feeder only.
**With Dynasty® 200 Series or HF-251 (non-critical).

Gasoline/LP Engines

Gasoline: Kohler CH 23
Gasoline: Subaru EH 65
LP: Kohler CH 730

V-twin-cylinder, 4-cycle, overhead valve, industrial, air-cooled

Diesel Engine

Kubota D722

3-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- Spectrum® Plasma Cutters
375 X-TREME™ #907 339 (pg 8)
625 X-TREME™ #907 404 (pg 8)
- Dynasty® 200 Series (pg 18)
- SuitCase® X-TREME™ Wire Feeders (pg 39)
- All-Purpose Running Gear for Gas/LP models (pg 75)
#300 396 with Inner Tubes
#300 477 with Never Flat™ tires
- LP Tank Mounting Assembly #195 329 (pg 76)
- Protective Cage with Cable Holders #195 331 for Gas/LP models #300 052 for Diesel models (see pg 60 for description)
- Adapter Cord, Full KVA #300 158 (pg 76)
- 1-Phase Full KVA Plug Kit #119 172 (pg 76)
- Remote Oil Drain/Filter Kits (pg 77)
- Protective Covers (pg 77)
- HWY-1000 Trailer #195 013 (pg 77)
- Engine Tune Up Kits are available from your Miller parts distributor.

See your Miller distributor for other popular Miller options and accessories.

*More models are available — see our Web site or Literature No. ED/4.4.

**AC welding output is not available on units with Battery Charger option.

***LP Tank Mounting Assembly (pg 76) sold separately. Tank not included See Wildcat/Bobcat/Traillblazer performance comparison chart on page 59.

	Stock Number*	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104° F (40° C)	Single-Phase Generator Power	Dimensions	Net Weight
Gasoline	(#907 211) Kohler 23 HP at 3600 RPM	CC/AC CC/DC	Stick/TIG	40–100 A 60–140 A 80–200 A 100–250 A	250 A at 25 V, 100% Duty Cycle	Peak: 11,000 watts Continuous: 9500 watts, 88/44 A, 120/240 VAC, 60 Hz	Gas/LP Models H: 28 in (711 mm) H: 33 in (838 mm) to top of exhaust W: 20 in (508 mm) D: 45½ in (1156 mm)	Gas/LP Models 556 lb (252 kg) Diesel Model 700 lb (318 kg)
	(#907 212) Subaru 23 HP at 3600 RPM (#907 211-02-1)** Kohler w/12/24/36 V Battery Charger	CV/DC	MIG/FCAW	17–22 V 20–28 V	250 A at 28 V, 100% Duty Cycle 275 A at 25 V, 60% Duty Cycle			
LP	(#907 211-03-1)*** Kohler 25 HP at 3600 RPM w/CSA Approval and GFCI							
Diesel	(#907 213) Kubota 19 HP at 3600 RPM						Diesel Model H: 30 in (762 mm) H: 34¼ in (870 mm) to top of exhaust W: 20 in (508 mm) D: 52 in (1321 mm)	



Trailblazer® 302 & 275 DC (Gas, LP or Diesel)

See Literature No. ED/4.77

High output, unbeatable arc performance, and the two generator system make these engine drives perfect for construction, fabrication, and maintenance/repair operations.



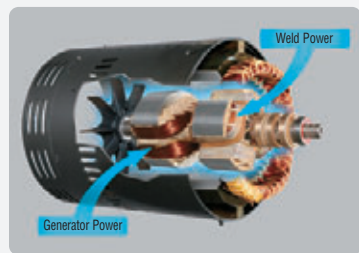
Trailblazer 302 gas engine drive

Trailblazer 302 diesel engine drive

Trailblazer 275 DC

The industry's best performing engine drives!

Toughest Welders...



Two Generators—One Machine. Trailblazer Series offers the only 2-generator system— one for welding, and one for generating power— meaning no interaction between tools and the welding arc, and it has the strongest generator power while welding.

Superior arc performance

- Four preset DIG settings (Stick)
- Adaptive Hot Start™ (Stick)
- Excellent MIG/FCAW arc performance
- Lift-Arc™ TIG with Auto-Crater™ and Auto-Stop™

DC TIG Arc End with Auto-Crater™ (patent pending)

- Eliminates need for a remote control
- Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- Eliminates unwanted arc strikes outside the weld area

Accu-Rated™ 11,000 watts of usable peak power cranks out enough power for most applications: job site, farm/ranch, or home. 9,500 watts of continuous power.

Self-calibrating digital weld meters with maintenance displays

- Preset and actual weld amperage/voltage
- Hour meter function
- Oil change interval
- Fuel gauge
- Engine RPMs
- Diesel: High coolant temperature and low oil pressure shutdowns
- Diesel: Low fuel shutdown— engine shuts down before system runs out of fuel making restarts easy

EXCLUSIVE! Super-tough protective armor with covers has high-impact resistance in all temperatures and is chemical-resistant. Other applications include: automotive bumpers, tractor hoods and panels, lawn mower decks, large structural parts, etc.

Output stud and receptacle covers are required by OSHA and CSA for job site safety.

Reduced sound level— up to 1/3 less noise than previous models. Quietest in its class.

Heavy Industrial

Processes

- MIG (GMAW)¹
- Flux Cored (FCAW)¹
- AC²/DC Stick (SMAW)
- AC²/DC TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16 in carbons, capable 1/4 in carbons)

¹With wire feeder.

²302 model only.

³Both models with Dynasty 200® Series or 302 model with HF-251.

Gasoline/LP Engines

Gasoline: Kohler CH 23

Gasoline: Subaru EH 65

LP: Kohler CH 730

V-twin-cylinder, 4-cycle, overhead valve, industrial, air-cooled

Diesel Engine

Kubota D722

3-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- Spectrum® Plasma Cutters 625 X-TREME™ #907 404 (pg 8) 875 #907 390-01-1 (pg 9)
- Dynasty® 200 Series (pg 18)
- SuitCase® X-TREME™ 12VS Wire Feeder #195 500 (pg 39)
- SuitCase® 12RC Wire Feeder #194 940 (pg 40)
- Spoolmatic® 30A Aluminum Spool Gun /WC-24 Control #130 831 / #137 549 (pg 42)
- All-Purpose Running Gear for Gas/LP models (pg 75) #300 396 with Inner Tubes #300 477 with Never Flat™ tires
- LP Tank Mounting Assembly #195 329 (pg 76)
- Protective Cage with Cable Holders #195 331 for Gas/LP models #300 052 for Diesel models (see pg 60 for description)
- Adapter Cord, Full KVA #300 158 (pg 76)
- 1-Phase Full KVA Plug Kit #119 172 (pg 76)
- Remote Oil Drain/Filter Kits (pg 77)
- Protective Covers (pg 77)
- HWY-1000 Trailer #195 013 (pg 77)
- HF-251D-1 #042 388 (pg 81)
- Engine Tune Up Kits are available from your Miller parts distributor.

See your Miller distributor for other popular Miller options and accessories.

*More models are available— see our Web site or Literature No. ED/4.77. **LP Tank Mounting Assembly (pg 76) sold separately. Tank not included. See Wildcat/Bobcat/Trailblazer performance comparison chart on page 59.

Engine Type	Model	Stock Number*	Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output at 25 V (at 104°F/40°C)	Single-Phase Generator Power	Dimensions	Net Weight
Gasoline	Trailblazer 275 DC	(#907 214) Kohler, 23 HP at 3600 RPM (#907 215) Subaru, 23 HP at 3600 RPM	CC/DC	Stick/TIG	10–275 A	275 A at 100% Duty Cycle	Peak: 11,000 watts Continuous: 9500 watts 88/44 A, 120/240 VAC, 60 Hz	Gas/LP Models H: 28 in (711 mm) H: 33 in (838 mm) to top of exhaust W: 20 in (508 mm) D: 45½ in (1156 mm) Diesel Model H: 30 in (762 mm) H: 34¼ in (870 mm) to top of exhaust W: 20 in (508 mm) D: 52 in (1321 mm)	Gas/LP Models 568 lb (258 kg) Diesel Model 720 lb (327 kg)
	LP	Trailblazer 275 DC**	(#907 214-02-2) Kohler 25 HP at 3600 RPM	CV/DC	MIG/FCAW	13–33 V, 10–275 A			
Gas	Trailblazer 302	(#907 216) Kohler, 23 HP at 3600 RPM (#907 217) Subaru, 23 HP at 3600 RPM	CC/AC	TIG/Stick	10–225 A	200 A at 60% Duty Cycle			
	LP	Trailblazer 302**	(#907 216-02-2) Kohler 25 HP at 3600 RPM	CC/DC	Stick/TIG	10–300 A			
Diesel	Trailblazer 302	(#907 218) Kubota 19 HP at 3600 RPM	CV/DC	MIG/FCAW	13–35 V, 10–325 A	300 A at 100% Duty Cycle			



Heavy Industrial CC CV AC DC

Trailblazer® 302 Air Pak™

See Literature No. ED/4.78

Powerful all-in-one tool is designed for repair and construction with unbeatable multiprocess weld quality, integrated rotary screw air compressor, and 12,000 watts of generator power for job site tools.



NEW!

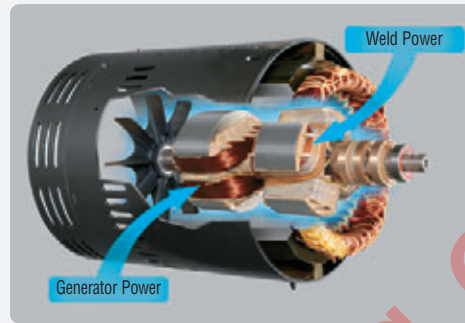
Available
1st Quarter

Size and weight advantage. By adding just 14 inches of length to a Trailblazer, the Air Pak occupies up to 50% less truck bed space and up to 25% less axle weight compared to using a separate engine-driven air compressor.

Cutting and gouging advantage. Integrated air compressor, ample generator power for plasma cutters, and the machine power to Carbon Arc gouge deliver cutting and gouging versatility.

EXCLUSIVE! Capable of running air tools at idle. Reduce noise and fuel consumption by running impacts, decking punches, and many other types of air tools at idle speed.

Industry-leading 12,000 watts of peak power is voltage regulated and independent of weld settings. 11,000 watts of continuous power.



Two Generators—One Machine. Trailblazer Series offers the only 2-generator system—one for welding, and one for generating power—meaning no interaction between tools and the welding arc, and it has the strongest generator power while welding.



Rotary screw air compressor

- Runs most air impact wrenches at idle
- Delivers up to 26 CFM and 150 PSI of air with no storage tank
- Gives 100% deliverable air
- Compressor is warranted by Miller for 3 years

Processes

- MIG (GMAW)*
- Flux Cored (FCAW)*
- AC/DC Stick (SMAW)
- AC**/DC TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16 in carbons, capable 1/4 in carbons using integrated air compressor)

* With wire feeder.
** With Dynasty 200® Series or HF-251 (non-critical).

Gasoline Engine

Kohler CH 750

V-twin-cylinder, 4-cycle, overhead valve, industrial, air-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- Spectrum® Plasma Cutters 625 X-TREME™ #907 404 (pg 8)
- 875 #907 390-01-1 (pg 9)
- Dynasty® 200 Series (pg 18)
- SuitCase® X-TREME™ 12VS Wire Feeder #195 500 (pg 39)
- SuitCase® 12RC Wire Feeder #194 940 (pg 40)
- Spoolmatic® 30A Aluminum Spool Gun / WC-24 Control #130 831 / #137 549 (pg 42)
- Protective Cover #300 379 (pg 77)
- RTI Filter and Bracket #300 491 (pg 80)
- HF-251D-1 #042 388 (pg 81)



- **Desiccant Air Dry System #195 117** Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.



- **Protective Cage with Cable Holders #300 473**
 - Air Cooler with Separator #300 420
 - Engine Tune Up Kits are available from your Miller parts distributor.
- See your Miller distributor for other popular Miller options and accessories.

Stock Number (#907 376) Kohler 30 HP at 3600 RPM	Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output at 32 V (at 104°F/40°C)	Single-Phase Generator Power	Dimensions	Net Weight
	CC/DC	Stick/TIG	10–300 A	280 A at 100% Duty Cycle	Peak: 12,000 watts Continuous: 11,000 watts	H: 34½ in (838 mm) W: 20 in (508 mm) D: 59½ in (1511 mm)	771 lb (350 kg)
	CV/DC	MIG/FCAW	13–35 V, 325 A	300 A at 100% Duty Cycle	100/50 A, 120/240 VAC, 60 Hz		
	CC/AC	TIG/Stick	10–225 A	225 A at 60% Duty Cycle			
Air Compressor	Features	Free Air Delivery at 3600 RPM	Free Air Delivery at 3000 RPM	Free Air Delivery at 2400 RPM (Idle)	Working Pressure Constant	Duty Cycle	Oil Capacity
By Miller	Rotary screw with electric clutch for on/off. Oil change intervals 500 hours. Life expectancy 30,000 hours.	26 cfm (0.73 m³/min)	21 cfm (0.59 m³/min)	17 cfm (0.48 m³/min)	80–160 psig	100%	1.75 qt (1.7 L)

CRS



Choose the Right Diesel Engine Drive

Bobcat™ 250 Diesel



- Compact
- Lightest weight
- Lowest price point

Trailblazer® 302 Diesel



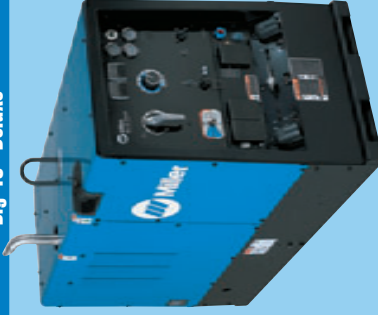
- Compact
- Lightweight
- Unbeatable arc performance

PRO 300



- Low speed
- Quiet
- Unbeatable arc performance
- Most fuel efficient

Big 40® Deluxe



- Powerful
- Quiet
- Powered by CAT

Product Description

Rugged, compact, and lightweight diesel engine drive is great for Stick and Flux Cored welding and is the lowest priced diesel welder/generator.

Compact, lightweight, unbeatable arc performance, and the two-generator system make this perfect for construction (pipe and structural), maintenance/repair operations, and fabrication.

Low speed and quiet with unbeatable arc performance make this perfect for construction (pipe and structural), maintenance/repair operations, and fabrication.

Powerful, multiprocess machine is great for Carbon Arc gouging and welding for maintenance/repair operations and construction.

Weld Performance

Stick	Very Good	Excellent	Very Good
MIG – Wire (Solid/FCAW), Steel	Very Good	Excellent	Very Good
MIG – Wire, Aluminum with Spool Gun	Good	Excellent	Excellent
TIG – DC, Steel	Very Good	Excellent	Very Good
TIG – AC, Aluminum w/H.F.*	Fair	Not Available	Fair/Good
Carbon Arc Gouging (Rated, Capable of)	3/16 in, 1/4 in	3/16 in, 1/4 in	5/16 in, 3/8 in
Amperage/Voltage Range	40–275 A, 17–28 V	10–325 A, 13–35 V	15–500 A, 14–40 V

Key Features

Standard Generator Power	11,000 Watts	11,000 Watts	5,500 Watts
Optional Generator Power	—	—	15,000 Watts (3-Ph)/12,000 Watts (1-Ph)
Sound Level (Fully Loaded)	80.5 dB	80.5 dB	73.8 dB (1/3 less noise)
Weight	700 lb	720 lb	1545 lb
Size (H x W x D in Inches) Height is without exhaust stack	28-1/4 x 20 x 62 in	28-1/4 x 20 x 52 in	43 x 28-1/2 x 64-1/2 in
Engine Speed (Idle/High)	2400/3600 RPM	2400/3600 RPM	1250/1800 RPM
Weld Meters	Not Available	Digital — Preset and Weld Displays	Analog — Weld Displays

Note: See the following pages for other diesel machines that may fit your applications. *High Frequency Arc Starter and Stabilizer

PRO 300

See Literature No. ED/5.21

Reliable low-speed diesel with outstanding arc performance.
Ideal for construction, fabrication or pipewelding professionals.



Heavy Industrial 

Processes

- Stick (SMAW)
- MIG (GMAW)
- Flux Cored (FCAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/16 in carbons, capable 1/4 in carbons)

Diesel Engine

EPA Compliant! Caterpillar C1.5
3-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- Spectrum® 2050 (pg 9)
- Dynasty® 200 Series (pg 18)
- SuitCase® X-TREME™ 12VS/12RC (pg 39/40)
- 1-Phase Full KVA Plug Kit #119 172 (pg 76)
- Protective Cover #195 301 (pg 77)
- Mid-Frame Trailer #195 481 (pg 77)
- PRHC-14 Remote #195 511 (pg 81)

See your Miller distributor for other popular Miller options and accessories.



Improved!

Superior Arc Performance!

Meter maintenance displays:

- Hour meter function
- Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown — engine shuts down before system runs out of fuel making restarts easy

The Vault — ultimate control board reliability.

Housed in a sealed vault, sealed connections are made through watertight plugs that make these components impenetrable to dust and moisture.



Tailored arc control (DIG) allows arc characteristics to be changed for specific applications and electrodes. Smooth running 7018 or stiffer, more penetrating 6010.

Improved arc starts and arc stability for excellent performance in all applications.

Easy to use — simple controls make it easy to set-up and weld.

Quiet — only 71 dba (96 Lwa) at maximum output. Improves work site communication and safety.

Compact design fits sideways in a standard pickup.

Optional stainless steel package available.

CSA, IEC and NEMA compliant.

*More models are available — see our Web site or Literature No. ED/5.21.

Diesel	Stock Number* (#907 144) CAT, 22 HP at 1800 RPM (#907 144-02-1) CAT, 22 HP at 1800 RPM, Stainless Steel Appearance Pkg/120 V Block Heater	Welding Mode	Amp/Volt Ranges	Rated Output at 104°F (40°C) 300 A at 32 V, 60% Duty Cycle	Single-Phase Generator Power Peak: 12,000 watts Continuous: 10,000 watts 83/42 A, 120 GFCI/240 VAC, 60 Hz	Dimensions H: 32 in (813 mm) W: 26 in (660 mm) D: 56 in (1422 mm)	Net Weight 1100 lb (499 kg)
		CC/DC	20–410 A				

Explore Your Passion, Build Your Business

Need advice for improving your manufacturing, fabrication or construction operations? Have a passion for motorsports? Or are you simply looking for some project inspiration? The answer is only a mouse click away — just look for the “Industries & Interests” tab at MillerWelds.com and unleash your potential.



Turn your “inbox” into an “information box.”
Sign up for Miller’s Power Click eNewsletter
at MillerWelds.com/powerclick



Big 40[®] CC or CC/CV

See Literature No. ED/8.5



Similar to the Big Blue 400, but powered by CAT with added features for the owner/operator.



Big 40 CC/CV deluxe model shown.

Deluxe Model has AC/DC polarity switch.

Quiet—only 65 db (90 Lwa) at idle and 73 db (98 Lwa) at maximum output.

Automatic idle and engine gauges standard on all models.

NEW! Meter maintenance displays:

- Hour meter function
- Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown—engine shuts down before system runs out of fuel making restarts easy

Designed and built with reliable, heavy-duty industrial components to allow it to operate in remote locations without downtime.

Hot Start™ makes it easy to start all types of Stick electrodes.

Arc-Drive enhances Stick welding, especially on pipe, by focusing arc and preventing electrode from going out.

5500-watt peak AC power independent of weld settings means no interaction between tools and the welding arc.

CSA, IEC and NEMA compliant.

Heavy Industrial ● CC^{CC} CV DC^{AC} DC

Processes

- AC/DC Stick (SMAW)
- AC/DC TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons—rated 5/16 in and capable 3/8 in)
- Stud
- MIG (GMAW)³
- Flux Cored (FCAW)³

¹Deluxe model only.

²Deluxe model with HF-251, or all models with Dynasty[®] 200 Series.

³CC/CV models only.

Diesel Engine

EPA Compliant! Caterpillar C2.2

4-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

See distributor for Miller accessories.

Model	Stock Number	Process	Amp/Volt Ranges	Rated Output at 100% Duty Cycle (at 104°F/40°C)	Generator Power	Dimensions	Net Weight
Big 40 CC	(#907 171) CAT, 33 HP at 1800 RPM	DC Stick/TIG	55–500 A	400 A at 36 V (14.4 kW)	Peak: 5500 watts, Continuous: 4000 watts, 34/17 A, 120 GFCI/240 VAC	H: 43 in (1092 mm) W: 28 1/2 in (724 mm) D: 64 7/16 in (1637 mm)	1545 lb (701 kg)
Big 40 CC/CV Deluxe Model	(#907 170-03-1) w/15,000 watts, Weld Meters and AC/DC Polarity Switch CAT, 33 HP at 1800 RPM	AC/DC Stick/TIG/MIG/FCAW	15–550 A (DC) 14–40 V (DC) 25–350 A (AC)	AC: 300 A at 32 V (9.6 kW) DC: 400 A at 36 V (14.4 kW)	Additional Generator Power for Deluxe Model 3-Phase: 15 kW, 36 A, 240 VAC, 60 Hz or 1-Phase: 12 kW, 50 A, 120/240 VAC, 60 Hz while not welding		

Big Blue[®] 400 and 500 CC or CC/CV

See Literature No. ED/10.8

Designed for fleet owners, construction contractors and rental companies who want a powerful diesel welder/generator and place a premium on rugged reliability with proven performance.



Big Blue 500 CC/CV deluxe model shown.

NEW! Meter maintenance displays:

- Hour meter function
- Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown—engine shuts down before system runs out of fuel making restarts easy

CC/CV models have the vault for control board reliability (see PRO 300 for details).

Designed and built with reliable, heavy-duty industrial components to allow operation in remote locations, without downtime.

Enclosed robust case design protects internal components from impact, allows air flow to cool and prolong the life of the engine, and reduces sound levels.

Hot Start™ makes it easy to start all types of Stick electrodes.

Arc-Drive enhances Stick welding, especially on pipe, by focusing arc and preventing electrode from going out.

5500-watt peak AC power independent of weld settings means no interaction between tools and the welding arc.

Quick and easy maintenance with single-side access to oil level check, oil fill, oil filter, fuel filter and air cleaner.

CSA and NEMA compliant.

Heavy Industrial ● CC^{CC} CV DC

Processes

- Stick (SMAW) • TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (Carbons—400: rated 5/16 in and capable 3/8 in, 500: rated 3/8 in)
- Stud
- MIG (GMAW)*
- Flux Cored (FCAW)*

*CC/CV models only.

Diesel Engines

EPA Compliant Choices!

400 — Deutz D 2011 L03i

3-cylinder, industrial, air/oil-cooled

400 — Perkins 404D-22

4-cylinder, industrial, liquid-cooled

500 — Deutz D 2011 L04i

4-cylinder, industrial, air/oil-cooled

500 — Perkins 404D-22T Turbo

4-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

See distributor for Miller accessories.

*More models are available—see our Web site or Literature No. ED/10.8.

**Adds Auto Idle, Weld Meters and Optional Generator Power.

Note: All models come standard with Engine Gauges.

Model	Stock Number*	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Generator Power	Dimensions	Net Weight
Big Blue 400 CC	(#907 173) Deutz, 32.0 HP at 1800 RPM (#907 175) Perkins, 32.6 HP at 1800 RPM	DC Stick/TIG	55–500 A	400 A at 36 V (14.4 kW), 100% Duty Cycle	Peak: 5500 watts, Continuous: 4000 watts, 34/17 A, 120 GFCI/240 VAC	H: 43 in (1092 mm) W: 28 1/2 in (724 mm) D: 64 7/16 in (1637 mm)	Deutz 1655 lb (751 kg) Perkins 1545 lb (701 kg)
Big Blue 400 CC/CV Deluxe Model	(#907 327)** Deutz, 32.0 HP at 1800 RPM (#907 329)** Perkins, 32.6 HP at 1800 RPM	DC Stick/TIG/MIG/FCAW	15–550 A 14–40 V		Additional Generator Power for Deluxe Model 3-Phase: 15 kW, 36 A, 240 VAC, 60 Hz or 1-Phase: 12 kW, 50 A, 120/240 VAC, 60 Hz while not welding		
Big Blue 500 CC	(#907 181) Deutz, 48.6 HP at 1800 RPM	DC Stick/TIG	55–600 A	500 A at 40 V (20 kW), 100% Duty Cycle	Peak: 5500 watts, Continuous: 4000 watts, 37.5/18.7 A, 120/240 VAC	H: 43 in (1092 mm) W: 28 1/2 in (724 mm) D: 64 7/16 in (1637 mm)	Deutz 1695 lb (769 kg) Perkins 1565 lb (710 kg)
Big Blue 500 CC/CV Deluxe Model	(#907 331)** Deutz, 48.6 HP at 1800 RPM (#907 333)** Perkins, 44.4 HP at 1800 RPM	DC Stick/TIG/MIG/FCAW	20–600 A 14–40 V		Additional Generator Power for Deluxe Model 3-Phase: 20 kW, 48 A, 240 VAC, 60 Hz or 1-Phase: 12 kW, 50 A, 120/240 VAC, 60 Hz while not welding		



PipePro® 304

See Literature No. ED/10.6

XMT® 304 arc performance powered by a long-life Kubota diesel engine. Designed for the professional pipe welder and mechanical contractor.



PipePro 304 shown with Dual Power Option.

Patented Weld at Idle™ provides up to 5000 watts of weld power (225 A at 23 V, 170 A at 30 V). When more power is needed the machine automatically goes to high speed with no change in the arc.

Exceptional multiprocess arc. Excellent (uphill/downhill) bead (root), hot pass, fill and cap control on Stick welding. DIG control changes soft arc to stiff arc that prevents electrode sticking. Lift-Arc™ TIG for DC welding without use of a HF unit. MIG arc runs in a variety of modes with excellent results using any wire or flux core in the field. Inductance control customizes weld puddle.

Patented Dual Power Option™ operates on engine or 230 volt single- or three-phase electric input power which eliminates fuel cost, noise, engine wear and emissions.

12,000 watt voltage-regulated generator power allows tools, inverter welders or plasma cutters to run without affecting the arc while welding.

High welding outputs to dominate larger diameter flux cored wires for increased deposition and Air Carbon Arc gouging thru 1/4 in carbons.

Compact and lightweight design fits sideways in a standard pickup.

Toolless top and side access allows easy and faster maintenance with little clearance space needed. Toolless remote oil drain is standard.

Optional stainless steel package available.

Heavy Industrial ● CC CV DC

Processes

- MIG (GMAW)
- Pulsed MIG (GMAW-P)*
- Flux Cored (FCAW)
- DC Stick (SMAW)
- DC TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (1/4 in carbons)

*With optional Optima™ Pulse Control.

Diesel Engine

EPA Compliant! Kubota D1005 3-cylinder, industrial, liquid-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- Spectrum® Plasma Cutters 625 X-TREME™ #907 404 (pg 8)
- 875 #907 390-01-1 (pg 9)
- SuitCase® X-TREME™ 12VS/12RC #195 500/#194 940 (pg 39/40)
- Full KVA Plug Kit 1-Phase #119 172 (pg 76)
- 3-Phase #007 470 (pg 76)
- Protective Cover #195 125 (pg 77)
- HWY-224 Trailer #043 805 (pg 77)
- PRHC-14 Remote #195 511 (pg 81)

See your Miller distributor for other popular Miller options and accessories.

Diesel	Stock Number	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 104°F (40°C)	Generator Power	Dimensions	Net Weight
	(#903 731) Kubota, 26 HP, 3600/2500 RPM (#903 731-01-2) Stainless Steel Package (#903 731-01-3) with Dual Power	CC/DC CV/DC	Stick/TIG MIG/FCAW/ Pulsed MIG	5-400 A 10-34 V	300 A at 32 V, 60% Duty Cycle	Single-Phase: 12,000 watts, 100/50 A, 120/240 VAC, 60 Hz; or Three-Phase: 12,000 watts, 30 A, 240 VAC, 60 Hz	H: 30 in (762 mm) W: 24 in (610 mm) D: 59½ in (1511 mm)	910 lb (412 kg)

Miller Du-Op®

See Literature No. ED/10.9

Designed for fleet owners and construction contractors who want a single low-speed diesel engine to provide two independent high-quality multiprocess arcs.



Shown with optional SuitCase 12RC portable wire feeder.

Save fuel, reduce maintenance costs, increase productivity.

Deutz F3L914 EPA engine has 14% more horsepower.

Automatic engine shutdown protects engine if low oil pressure or high coolant temperature occurs.

Multiprocess capabilities performed independently at the same time — each operator has a choice of Stick, TIG or MIG.

Paralleling switch parallels both outputs to a single side for double the amperage. This provides a safe and easy way to run large electrodes, Stud weld or Air Carbon Arc gouge.

Hot Start™ automatically provides additional amperage to start electrode. This produces positive starts and reduces chance of arc marking.

Standard CV allows MIG and Flux Cored welding without hassle and expense of a CV module kit.

Single range allows full range of operation in all processes without walking back to switch ranges.

Heavy Industrial ● CC CV DC

Processes

- Stick (SMAW)
- MIG (GMAW)
- Flux Cored (FCAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 3/8 in carbons)

Diesel Engine

EPA Compliant! Deutz D 914 L03i 3-cylinder, industrial, air-cooled

Note: Engines are warranted separately by engine manufacturer.

Most Popular Accessories

- SuitCase® X-TREME™ 12VS #195 500 (pg 39)
- SuitCase® 8RC or 12RC with remote voltage control (pg 40)
- HWY-224 Trailer #043 805 (pg 77)
- OFR-224 Trailer #043 802 (pg 77)
- HWY-430 Trailer #043 806 (pg 77)
- RCCS-14 Remote Contactor and Current Control #043 688 (pg 82)
- RHC-14 Remote Hand Control #129 340 (pg 82)

See your Miller distributor for other popular Miller options and accessories.

Diesel	Stock Number	Process	Amp/Volt Ranges	Rated Output at 40% Duty Cycle (at 104°F/40°C)	Generator Power	Dimensions	Net Weight
	(#907 317) Deutz 48 HP at 1800 RPM	DC Stick/TIG/ MIG/FCAW	1 Welder: 15-600 A, 10-32 V 2 Welders: 15-300 A, 10-32 V	1 Welder: 550 A at 30 V (16.5 kW) 2 Welders: 275 A at 31 V (8.5 kW)	Peak: 5500 watts Continuous: 4000 watts, 34/17 A, 120/240 VAC	H: 47½ in (1210 mm) W: 31¼ in (794 mm) D: 60½ in (1537 mm)	2005 lb (909 kg)



Big Blue® Air Pak™ See Literature No. ED/10.5

Designed for heavy construction or maintenance and repair contractors, this all-in-one multiprocess welder/generator/compressor and optional AC weld/battery charge/jump-start package sets the standard for power and performance.



Deluxe model shown without the Vandalism Lockout Kit.

NEW! Meter maintenance displays:

- Hour meter function
- Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown—engine shuts down before system runs out of fuel making restarts easy

Ingersoll-Rand ultra-reliable industrial rotary screw air compressor. Belt-driven with automatic belt tensioner.

Independent compressor controls include an on/off switch for applications not requiring compressed air.

Quiet—only 70 dB (95 Lwa) at idle and 79 dB (104 Lwa) at maximum output.

Hot Start™ makes it easy to start all types of Stick electrodes.

Arc-Drive™ enhances Stick welding, especially on pipe, by focusing arc and preventing electrode from going out.

Optional AC/DC/battery charge/jump-start for AC TIG welding and 12 or 24 volt batteries. *Note: High-frequency control required for AC TIG welding.*

CSA and NEMA compliant.

MSHA approved for miners with purchase of certificate from Deutz dealer.

- * Comes complete with Engine Gauges, Auto Idle and 12 V Intake Manifold Heater.
- ** Cold Weather Model—Comes complete with Engine Gauges, Auto Idle, Weld Meters, Battery Lockout/Tagout Disconnect Switch, 12 V Intake Manifold Heater and 120 V Oil Pan Heater.
- *** Deluxe Model—Comes complete with Engine Gauges, Auto Idle, Weld Meters, Battery Lockout/Tagout Disconnect Switch, 12 V Intake Manifold Heater, 120 V Oil Pan Heater, Vandalism Lockout Kit, AC/DC/Battery Charge/Jump-Start Switch and Optional Generator Power.

Heavy Industrial ● CC CV DC AC DC

Processes

- AC*/DC Stick (SMAW)
- MIG (GMAW)
- AC**/DC TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 1/2 in carbons)
- Stud

**Deluxe model only.
**Deluxe model with HF-251, or all models with Dynasty® 200 Series.*

Diesel Engine

EPA Compliant! Deutz TD 2011 L04 Turbocharged, 4-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

Most Popular Accessories

- Desiccant Air Dry System #195 117



Eliminates moisture in the air stream and prevents air line freeze-ups in cold climates.

See your Miller distributor for other popular Miller options and accessories.

Stock Number (#907 062)* Base Model (#907 062-04-1)** Cold Weather Model (#907 062-07-1)*** Deluxe Model	Welding Mode	Weld Output Range	Weld Output Rated at 104°F (40°C) NEMA Amperage and Voltage	Max. Open-Circuit Voltage	Generator Power at 104°F (40°C)	Dimensions	Weight
	CC/AC (Deluxe Model Only)	20–575 A	400 A at 36 V (14.4 kW), 100% Duty Cycle	64	Peak: 5500 watts Continuous: 4000 watts, 34/17 A, 120/240 VAC, 60 Hz while welding	H: 43 in (1092 mm) W: 28½ in (724 mm) D: 67½ in (1715 mm)	Base and Cold Weather Models Net: 1931 lb (876 kg) Ship: 1982 lb (899 kg) Deluxe Model Net: 1956 lb (887 kg) Ship: 2007 lb (910 kg)
CC/DC	20–750 A	600 A at 44 V (26.4 kW), 40% Duty Cycle 550 A at 42 V (23.1 kW), 60% Duty Cycle 500 A at 40 V (20 kW), 100% Duty Cycle	95	Additional Generator Power for Deluxe Model 3-phase, 20 kW, 48 A, 240 VAC, 60 Hz or 1-phase, 12 kW, 50 A, 120/240 VAC, 60 Hz while not welding			
CV/DC	14–40 V	500 A at 40 V (20 kW), 100% Duty Cycle	56				
Battery Charge Jump-Start (Deluxe Model Only)	12/24 V	750 A, 12 V, Jump-Start 750 A, 24 V, Jump-Start	14/28				

Air Compressor	Features	Free Air Delivery at 1850 RPM	Free Air Delivery at 1235 RPM (Idle)	Working Pressure Constant	Duty Cycle	Oil Capacity	Automatic Compressor Shutdowns
Ingersoll-Rand CE55 G1	Rotary screw with electric clutch for on/off. Oil change intervals 500 hours (same as engine). Life expectancy 30,000 hours.	60 cfm (1.70 m³/min)	40 cfm (1.13 m³/min)	100 psig 7 bar	100%	5 qt (4.7 L)	Oil Temperature

Big Blue® Turbo See Literature No. ED/10.3

Similar to the Big Blue Air Pak, but without the air compressor.



NEW! Meter maintenance displays:

- Hour meter function
- Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown—engine shuts down before system runs out of fuel making restarts easy

Turbo engine provides superior performance in high altitudes.

Highest output rating available on an engine-driven welder: 20–750 A range, 600 amps at 100% duty cycle!

Quiet—only 70 dB (95 Lwa) at idle and 79 dB (104 Lwa) at maximum output.

Hot Start™ makes it easy to start all types of Stick electrodes.

Arc-Drive™ enhances Stick welding, especially on pipe, by focusing arc and preventing electrode from going out.

5500-watt peak AC power independent of weld settings means no interaction between tools and the welding arc.

CSA and NEMA compliant.

Heavy Industrial ● CC CV DC

Processes

- Stick (SMAW)
- MIG (GMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (rated 1/2 in carbons, capable 5/8 in carbons)
- Stud

Diesel Engine

EPA Compliant! Deutz TD 2011 L04 Turbocharged, 4-cylinder, industrial, liquid-cooled

Note: Engine is warranted separately by engine manufacturer.

See distributor for Miller accessories.

Stock Number (#907 157) Deutz, 63.4 HP at 1800 RPM	Welding Mode	Process	Weld Output Range	Rated Output at 104°F (40°C)	Generator Power at 104°F (40°C)	Dimensions	Net Weight
	CC/DC	Stick/TIG	20–750 A	600 A at 44 V (26.4 kW), 100% Duty Cycle	Peak: 5500 watts Continuous: 4000 watts, 34/17 A, 120/240 VAC, 60 Hz while welding	H: 43 in (1092 mm) W: 28½ in (724 mm) D: 67½ in (1715 mm)	1755 lb (796 kg)
CV/DC	MIG/FCAW	14–40 V					



Spot Welders

Got questions about spot welding? Link to the Spot Welding section on MillerWelds.com for answers,

then check out the Product Pages and click on Accessories to build a complete system, as well as check out Models and Pricing.

Tongs and Tips

Miller offers a wide variety of both symmetrical and asymmetrical tong and tip configurations. Maximum capabilities of spot welders are obtained with minimum tong lengths. Tips are made of durable Class 2, long-wearing copper alloy.

See literature sheets SW/1.0 and SW/3.1 for full range of tongs and tips.



Air-Cooled Spot Welders

See Literature No. SW/1.0

MSW and LMSW Series lightweight, air-cooled units are portable, easy to operate, and provide a quick and effective means for spot welding mild, galvanized or stainless materials.



"T" models include timer panel with a 0 to 5 second weld timer and power on/off switch. Timer panel can be mounted on the optional SWP-2 pedestal or any other convenient location. Includes 10 ft (3 m) input power and interconnecting cords.

Hand lever locks tongs firmly on material, ensuring positive, accurate fit-up.

Accommodates a wide variety of tongs and tips.

Quick and easy adjustment for material thickness.

Reversible for left- or right-hand operation.

*Tongs and tips must be ordered separately — see Lit No. SW/1.0 for full range of tongs and tips.

1 Phase

Process

- Resistance Spot Welding

Note: Not recommended for welding aluminum, copper or copper alloys.

Most Popular Accessories

- Gyro Bail #041 979 (pg 81)
- Spot Welder Pedestal #040 872
- Spot Welder Timer MSW-41 #041 081
- LMSW-52 #041 082

Note: Tongs/tips must be ordered separately. One standard set of tips is supplied with each set of tongs; see diagram above.

See your Miller distributor for other popular Miller options and accessories.

Model/Stock Number*	Input 50/60 Hz	Work Capacity (Combined thickness uncoated mild steel using 6 in [152 mm] tongs)	Rated Output	Rated Output (Calibrated with standard-type tongs)			Max Open-Circuit Voltage	Dimensions	Net Weight
				6 in (152 mm)	12 in (305 mm)	18 in (457 mm)			
MSW-41 (#900 371) MSW-41T (#901 345) w/Timer	110 VAC 30 A	1/8 in (3.2 mm) or two pieces of 20 gauge (1.8 mm) galvanized steel	1.5 kVA at 50% Duty Cycle	5550 A	4500 A	3600 A	1.6	H: 6 in (152 mm) W: 3 1/4 in (83 mm) D: 13 in (330 mm)	22 lb (10 kg) 34 lb (15 kg) w/Timer
LMSW-52 (#900 377) LMSW-52T (#901 357) w/Timer	220 VAC 30 A	3/16 in (4.7 mm) or two pieces of 16 gauge (3.0 mm) galvanized steel	2.5 kVA at 50% Duty Cycle	6750 A	5800 A	4850 A	2.5	H: 6 in (152 mm) W: 3 1/4 in (83 mm) D: 16 in (406 mm)	30 lb (14 kg) 42 lb (19 kg) w/Timer

Water-Cooled Spot Welders

See Literature No. SW/3.1

SSW Series of water-cooled resistance spot welders offer the power needed for light fabrication and sheet metal work.



Built-in squeeze/weld timer makes it quick and easy to set or adjust squeeze and/or weld time in hundredths of a second.

Set-up/weld switch permits checking of tong pressure and alignment without making a weld.

LED display makes it easy to read and see timer settings.

Ten-step current control adjusts output current with no change in duty cycle.

Adjustable tong pressure nuts to adjust tong pressure for different thicknesses and applications.

*Coolant system required to operate — order separately. Tongs and tips must be ordered separately — see Lit. No. SW/3.1 for full range of tongs and tips.

1 Phase

Process

- Resistance Spot Welding

Note: Not recommended for welding aluminum, copper or copper alloys.

Comes Complete With

- Stationary welding head
- Remote foot switch
- 37-1/8 inch high all-steel pedestal inclusive of controls and timer
- Air filter, regulator assembly

Note: Order tongs/tips separately to match your applications.

Most Popular Accessories

- Coolant Systems (pg 76)
- Coolmate™ 3, 115 VAC #043 007
- Coolmate™ 3, 230 VAC #043 008
- Coolmate™ V3 #043 009
- Coolmate™ 4 #042 288

See your Miller distributor for other popular Miller options and accessories.

Model/Stock Number*	Input 50/60 Hz	Work Capacity (Combined thickness uncoated mild steel using 6 in [152 mm] tongs)	Rated Output	Rated Output (Calibrated with standard-type tongs)			Max Open-Circuit Voltage	Net Weight
				6 in (152 mm)	12 in (305 mm)	18 in (457 mm)		
SSW-2020 ATT (#903 826)	230 VAC, 90 A	1/4 in (6.3 mm)	20 kVA at 40% Duty Cycle	12,500 A	10,500 A	9000 A	3.55	185 lb (84 kg)
SSW-2040 ATT (#903 827)	460 VAC, 45 A							



Sub Arc

Did you know that Miller offers complete Sub Arc systems, including digital controllers, sub arc tractors and breakthrough Sub Arc technology? Visit the Sub Arc section of MillerWelds.com and learn more—including how some companies improved productivity by up to 60 percent!

MillerWelds.com/SubArc



Sub Arc DC Series

See Literature No. DC/19.8 and AY/12.0

While the Sub Arc DC 650 and 1000 have been optimized for the Sub Arc process and provide the arc characteristics favored by the industry, they also provide Air Carbon Arc cutting and gouging, Stick, and Flux Cored capabilities. The Sub Arc Series' arc control provides a stable and consistent output regardless of electrode size, electrode type or flux used.



Sub Arc DC 650

Sub Arc DC 1000

*Includes lift eye and strain relief.

Heavy Industrial ● CC CV DC 3 Phase

Processes

- Submerged Arc (SAW)
- Flux Cored (FCAW)
- Stick (SMAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (1/2 in carbons)

Model	Stock Number	Description	Welding Mode	Amperage/Voltage Range	Rated Output	Amps Input at Rated Output, 60 Hz					Max. Open-Circuit Voltage	Dimensions	Net Weight
						230 V	460 V	575 V	KVA	KW			
Sub Arc DC 650	(#907 338) 230/460/575 V	CC/CV, DC, Three-Phase	CC	50–815 A	650 A at 44 VDC, 100% Duty Cycle	126	63	50.4	50	34.8	72 VDC	H: 27 1/4 in (692 mm)* W: 22 1/4 in (565 mm) D: 36 in (914 mm)*	545 lb (247 kg)
			CV	10–65 V									
Sub Arc DC 1000	(#907 342) 230/460/575 V	CC/CV, DC, Three-Phase	CC	100–1250 A	1000 A at 44 VDC, 100% Duty Cycle	180	90	72	73	53	66 VDC		644 lb (292 kg)
			CV	10–60 V							38 VDC		



Automatic Weld Control



HDC 1500 DX with Digital Meters #300 438
HDC 1500 A #300 439

Automatic weld control offers reliability, flexibility and performance with its ability to interface with AC or DC CC/CV power sources having remote contactor and output control capabilities. Comes complete with two internal power strips to integrate with competitive power sources, run-in control for smooth arc starts, burnback control to prevent wire sticking on weld termination, and crater time, speed and output. See Literature No. AY/12.0 for more information.

RAD Wire Drive Assemblies

Miller offers either standard- or high-speed 115-volt heavy-duty wire drive assemblies. The RAD-400 has a wire feed speed range of 20–400 inches per minute (0.5–10 MPM). The RAD-780 has a wire feed speed range of 20–780 IPM (0.5–19.8 MPM). Included adapter plate allows mounting to 2-1/2, 4-1/4, and 4-5/8 inch bolt-hole patterns.



RAD-400 #195 265
 Standard-speed, right-angle wire drive assembly.

RAD-780 #195 266
 High-speed, right-angle wire drive assembly.

Included adapter plate allows mounting to 2-1/2, 4-1/4, and 4-5/8 inch bolt hole patterns.

Drive Rolls

“V” knurled drive rolls for use with hard-shelled cored wires.

- 1/16 in (1.6 mm) #132 955
- 5/64 in (2.0 mm) #132 960
- 3/32 in (2.4 mm) #132 961
- 7/64 in (2.8 mm) #132 962
- 1/8 in (3.2 mm) #132 963
- 5/32 in (4.0 mm) #193 700
- 3/16 in (4.8 mm) #193 701
- 7/32 in (5.6 mm) #193 702



Flux Handling Equipment

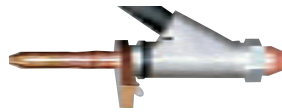


Flux Hopper with Valve #194 775
 Flux hopper with automatic flux valve will carry 25 pounds of flux. The opening is sized to allow hook-up of any flux-hopper-mounted recovery system. A slag screen is also provided.

Flux Recovery Systems

- Weld Engineering 1-508-839-9875
- American Vacuum 1-800-321-2849
- Invincible 1-800-282-6999

Submerged Arc Torches



OBT 600 #043 923
 600 amp, 100% duty cycle torch with concentric flux flow nozzle. Can be used with 1/16–7/32 in (1.6–5.6 mm) wire.

OBT 600 Torch Body Extensions

- 1 inch #043 967
- 2 inch #043 969
- 4 inch #043 973
- 6 inch #043 975



OBT 1200 #043 900
 1200 amp, 100% duty cycle torch with concentric flux flow nozzle. Can be used with 1/16–7/32 in (1.6–5.6 mm) wire. OBT 1200 features a replaceable breakaway adapter end to prevent costly damage should torch run into an obstruction.

OBT 1200 Torch Body Extension #043 981

Overall length with extension is 9 inches. Actual length of extension is 8-1/2 inches.

Torch Contact Tips

Wire Size	OBT 600	OBT 1200
1/16 in (1.6 mm)	#192 700	#192 141
5/64 in (2.0 mm)	#192 701	#199 026
3/32 in (2.4 mm)	#192 702	#192 142
7/64 in (2.8 mm)	#192 703	#200 771
1/8 in (3.2 mm)	#192 704	#192 143
5/32 in (4.0 mm)	#192 705	#192 144
3/16 in (4.8 mm)	#192 706	#192 136
7/32 in (5.6 mm)	#192 707	#200 756

Accessories

Wire Straightener #199 733
 For RAD-400 (standard-speed) or RAD-780 (high-speed) wire drive assembly.
 For wires 1/16–7/32 in (1.6–5.6 mm).

Light-Duty Cross Slide #195 411
 Allows 6 inches of travel adjustment. Two units can be stacked to provide vertical and horizontal movement. **Not recommended for tandem.**

NEW! Heavy-Duty Cross Slide #300 482
 Allows for 6 inches of travel adjustment and has a load capacity of 200 pounds. Recommended for tandem.

Wire Reel #108 008
 For 60 lb (27 kg) coil of wire. Requires Spool Support Assembly (#119 438).

Spool Support Assembly #119 438
 For 60 lb (27 kg) wire reel.

Cable Kit for HDC 1500 Controllers #195 308
 Includes 30 ft (9 m) 14-pin interconnect cable and 10-ft motor cable.

Motor Extension Cable #195 342
 25 ft (7.6 m) extension for the motor cable supplied in kit #195 308.

Extension Cables
 25 ft (7.6 m) #043 725
 50 ft (15 m) #043 726
 75 ft (23 m) #043 727
 14-pin welding power source control cable extends distance between power source and controller.

Power Source Interface for HDC 1500 A Controller #300 537
 For power sources without current and voltage feedback through 14-pin connection.



Miller Tractor
MT 1500 DX (with HDC 1500 DX) #951 060
MT 1500 A (with HDC 1500 A) #951 061

The Miller Tractor is a self-propelled, highly flexible welding unit designed to produce precision, high-quality Submerged Arc welds. It is available with either the HDC 1500 DX or 1500 A Automatic Weld Control and is comprised of a travel system complete with a main mounting mast and handle assembly, mounting arm for one wire reel, vertical and horizontal 4 x 4 in slides, control support arm and one set of two adjustable guide roll arms. See Literature No.DC/19.9 for more information.



Arc Armor™ Welding Helmets

Elite™ and Digital Elite™ Series

The ultimate helmets for demanding applications

- Auto-On/Auto-Off (Elite), Manual-On/Auto-Off (Digital Elite)
- Grind Mode
- Largest view—30% larger window
- Shades #8–13 and light state #3
- Excellent low-amperage TIG (5 amps)
- Includes \$25.00 accessory package*

The four-mode Digital Elite adds the following to the features above for maximum versatility

- Weld, Grind, Cut and X-Mode (Weld)
- X-Mode electromagnetically senses the arc eliminating sunlight interference (outdoors), obstructed sensors (pipe), lens openings in low-amperage apps (TIG) and obstructed sensors due to hidden or cavity welds
- All four modes feature memory for repeatability
- Bottom-mounted controls for easy accessibility

Performance™ Series

Our mid-range helmet for all welding applications

- Auto-On/Auto-Off and Grind Mode
- Shades #8–13 and light state #3
- Excellent low-amperage TIG (5 amps)
- Quick-release front cover lens assembly
- Bottom-mounted controls for easy accessibility
- Includes \$25.00 accessory package*

Pro-Hobby™ Series

The ideal helmet for light duty applications

- Manual On/Auto-Off circuitry
- Shades #8–12 and light state #3
- Extra protective lens covers included

Pro-Hobby™ FS #10

Ideal for farm, home and hobby

- Auto-darkening fixed shade #10
- Solar-powered, no batteries required
- Extra protective lens covers included

Not recommended for industrial applications as well as TIG or repetitive tack welding applications.

MP-10™ Passive Helmet

Ideal for farm, hobby and construction

- Available in **Black** (#235 626) or with **Inferno** (#235 627) graphic (see Elite helmet photos)
- Large viewing field 4 x 4 in (102 x 102 mm)
- Includes magnifying lens holder
- Uses industry-standard #10 size filter plate
- Optional hard hat adapter available (#222 003)
- Upgradeable to auto-darkening Elite or Digital Elite lens

*Accessory package includes five outside and two inside cover lenses, a Miller helmet bag and the exclusive headgear comfort cushion—a combined value of over \$25.00!

Elite™ and Digital Elite™ Series

E: Elite Models
DE: Digital Elite Models

The Joker™
E: #227 187
DE: #235 041



Inferno™
E: #222 669
DE: #234 761



Camouflage
E: #227 188
DE: N/A



Maple Leaf™
E: #222 670
DE: N/A



'29 Roadster™
E: #224 870
DE: N/A



Lucky's Speed Shop™
E: #237 744
DE: #237 745



Wicked™
E: #241 464
DE: #241 462



Stars and Stripes II™
E: #234 065
DE: #234 762



Vintage USA™
E: #237 838
DE: #236 340



Black
E: #216 322
DE: #234 763

PERFORMANCE™ Series

Motorsports™
#232 039



Millermatic™ II
#232 037



Blue Flame™
#236 341



Blue Rage™
#241 458



Camouflage
#241 460



America's Eagle™
#232 036



Fireball™
#234 514



Black
#232 035

Pro-Hobby™ Series



American Eagle™ II
#231 405



Millermatic™
#231 406



Camouflage
#231 407



Red Flame
#231 408



Variable Shade #231 404
Fixed Shade #231 703

Model	Lens Speed (Seconds)	Weld Mode (Shades)	Cut Mode (Shades)	Grind Mode (Shade)	Sensitivity Control	Delay Control	Viewing Field	Arc Sensors	Lens Power Control	TIG Rating	Battery Life	Magnifying Lens Holder	Weight	Warranty
Digital Elite™ Series	1/20,000	8–13 Weld and X-Mode	5–8	3	Yes	.10–1.0 sec	3.85 x 2.38 in (97 x 60 mm)	4	Manual-On Auto-Off	5 amps	3000 hrs	Yes	18 oz (510 g)	2 Years
Elite™ Series	1/20,000	8–13	No	3	Yes	.10–1.0 sec	3.85 x 2.38 in (97 x 60 mm)	4	Auto-On Auto-Off	5 amps	3000 hrs	Yes	18 oz (510 g)	2 Years
Performance™ Series	1/20,000	8–13	No	3	Yes	.10–1.0 sec	3.85 x 1.85 in (97 x 47 mm)	3	Auto-On Auto-Off	5 amps	2000 hrs	Yes	17 oz (482 g)	2 Years
Pro-Hobby™ Series	1/12,000	8–12	No	No	Yes	Slow/Fast	3.85 x 1.57 in (97 x 40 mm)	2	Manual-On Auto-Off	20 amps	2000 hrs	Yes	16 oz (454 g)	2 Years
Pro-Hobby™ FS #10	1/3600	Fixed #10	No	No	No	No	3.70 x 1.37 in (94 x 35 mm)	2	Auto-On Auto-Off	20 amps	Solar	Yes	16 oz (454 g)	2 Years



Arc Armor™ Apparel

We're redefining welding protection with products that provide optimal fit, comfort and performance, resulting in safer, more productive work environments. THAT'S THE ARC ARMOR DIFFERENCE.



Bib/Apron #231 125

Optional added protection for use on the Cloth and Combo Jackets.

- Premium leather
- Attaches with snaps across the chest as a bib or along the bottom as an apron



Welding Sleeves #231 096

- 100% INDURA® flame-resistant cotton fabric for cool, lightweight protection
- Premium leather for more protection where needed
- Wider elastic band at top of sleeve for improved comfort
- 21 in (533 mm) length



Head Threads

See your distributor for specific styles and sizes.

- Made from 100% cotton
- Caps available in six different sizes and are reversible to a solid color
- Caps have low, 6-1/2 in crown with soft bill
- Bandannas have a terry cloth insert sewn into the sweatband



Job-Site Tool Bag #228 028

- Over 20 separate pockets to store a variety of items
- Unzipped, the bag has an opening of 12 x 18-1/2 in (305 x 470 mm)
- Comfortable and well-padded shoulder strap



MIG Gloves

- #227 821 Small
- #227 822 Medium
- #227 823 Large
- #227 824 X-Large
- #235 046 2X-Large

For medium-duty MIG welding and metalworking tasks.

- Combination of durable top grain cowhide palm and abrasion-resistant pig split back
- Sewn with Kevlar® thread

H.D. MIG/ Stick Gloves

- #227 825 Small
- #227 826 Medium
- #227 827 Large
- #227 828 X-Large
- #235 047 2X-Large

For heavy-duty MIG and Stick welding and other metalworking tasks.

- Top grain cowhide
- Sewn with Kevlar® thread
- More padding and protection than MIG glove

TIG Gloves

- #227 813 Small
- #227 814 Medium
- #227 815 Large
- #227 816 X-Large
- #235 048 2X-Large

Designed to meet the specific requirements high quality TIG welding demands.

- Made from soft grain goatskin
- Sewn with Kevlar® thread

Metalworker Gloves

- #227 817 Small
- #227 818 Medium
- #227 819 Large
- #227 820 X-Large
- #235 049 2X-Large

Designed for the daily demands of the metalworker and material handler.

- Padded, goatskin palm
- Textured G-Grip™ patch for excellent grip
- Neoprene wrist with Velcro® closure for improved fit
- NOT intended for use while welding



Cloth Jacket

- #231 072 Small
- #231 073 Medium
- #231 074 Large
- #231 075 X-Large
- #231 076 2X-Large
- #231 077 3X-Large
- #231 078 4X-Large
- #231 079 5X-Large

- 100% INDURA® flame-resistant cotton
- Guaranteed flame-resistant for the life of the garment
- Sewn entirely with Nomex® thread
- Miller's patent-pending design allows for the addition of our leather Bib/Apron accessory



Combo Jacket

- #231 080 Small
- #231 081 Medium
- #231 082 Large
- #231 083 X-Large
- #231 084 2X-Large
- #231 085 3X-Large
- #231 086 4X-Large
- #231 087 5X-Large

- Premium leather
- INDURA® flame-resistant cotton
- Guaranteed flame-resistant for the life of the garment
- Sewn entirely with Nomex® flame-resistant thread
- Miller's patent-pending design allows for the addition of our leather Bib/Apron accessory



Leather Jacket

- #231 088 Small
- #231 089 Medium
- #231 090 Large
- #231 091 X-Large
- #231 092 2X-Large
- #231 093 3X-Large
- #231 094 4X-Large
- #231 095 5X-Large

- Premium, black leather
- "Expandable" leather strategically placed for added mobility
- Tapered, athletic cut for improved fit
- Stitched entirely with Nomex® flame-resistant thread

Aluminum MIG Welding 41-43
See Spoolmate, Spoolmatic, and XR-Control System

Advanced Manufacturing System Accessories 74

Carts, Cylinder Racks and Running Gear 74-75, 80

Controls
See Advanced Manufacturing System, MIG, TIG or Wire Feeder Accessories, Polarity Switches/Controls, and Remote Controls

Coolant Systems 76

Engine Drive Accessories
■ Gas/LP Mounting Assemblies, Cable Holder, Lifting Eye 76
■ Engine Drive Kits 76-77
■ Protective Covers 77
■ Trailers 77

Extension Cords 77

International-Style Connectors . 78

Load Banks 78

Meters 78

MIG Accessories
■ Accessory Kits 78
■ Protective Covers 78
■ Pulsing Control 78

MIG Guns and Accessories 79

Plasma Cutter Accessories
■ Cable Covers 80
■ Cart 80
■ Cutting Guides 80
■ Filters 80
■ Plugs and Cords 80
■ Protective Covers 80
■ Remote Pendant Controls 80
■ Torches 80

Polarity Switches/Controls 80

Remote Controls 81-82

Spot Welder Gyro Bail 81

Stick Accessory Kits 81

TIG Accessories
■ High-Frequency Arc Starters 81
■ Kits 81
■ Modules 81
■ Protective Covers 81
■ Remote Controls 82

Wire Feeder Accessories
■ Power Supply Adapters 82
■ Secondary Contactor 82
■ Spool Adapter 82
■ Spool Gun Controls 82
■ Turntable Assembly 82
■ Wire Straightener 82

The right welding and cutting accessories increase convenience, save time and money, perform better and help you meet the demands of any job. Especially check out our new carts and running gear on pages 74/75 and our new coolant system on page 76.

 For more information about accessories, visit MillerWelds.com/Accessories

Aluminum MIG Welding
See Spoolmate, Spoolmatic and XR-Control System (pages 41-43).

Advanced Manufacturing System Accessories
For adapters and drive motors, visit MillerWelds.com.

 **Coolant Flow Switch #195 461**
For Auto-Access.

To ensure coolant is flowing in the system. Lack of coolant flow may cause damage to water-cooled guns. Module allows wiring into the peripheral connector port. 50 ft (15.2 m) cable with connector and separate shell connector for simple modification to desired length in the field. It can be mounted on Auto-Access or as desired elsewhere. 1/4-turn quick connection.

MCS-2 Motorized Cross Slide #098 380 Control
#045 623 Adapter Plate*
Provides accurate weld head adjustment with convenient motorized control. Used to align the welding head (gun) to the weld joint, by providing vertical or horizontal adjustments, based on mounting preferences.
*Required when using two slides.

Carts, Cylinder Racks and Running Gear
See also Plasma Accessories.



Carrying Cart #056 301
For smaller Maxstars, CST 280, XMTs, and wire feeders. Cart is 34 in high x 30 in wide x 17 in deep (864 x 762 x 432 mm).



Cylinder Cart #042 537
For CST 280, Invisions, and XMTs. Has adjustable handles and is slanted for convenient access to power source front panel controls. Carries two 160 lb (72.6 kg) gas bottles or one gas bottle and one Coolmate V3 for TIG welding. Feeder mounted to tray above power source. Accommodates Coolmate 3 or 4 coolant systems.

 **Feeder Cart #142 382**
A low-profile, creeper cart which allows the operator to easily move the feeder around the work area.



Universal Cart and Cylinder Rack #042 934
For CST 280, Diversion 165, Dynasty 200 Series, Maxstar 200 Series, Invision 350 MPa, and XMT 304 and 350. Also accommodates gas cylinder up to 56 in (142.2 cm) high measuring 6 to 9 in (15.2 to 22.8 cm) in diameter. Provides storage for auxiliary items such as electrodes, helmets and gloves.



MIGRunner™ Cart #195 445
For Invision 350 MPa, and XMT 304 and 350. Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles. Durable, heavy-duty ergonomic handles are designed for comfort.



Running Gear Cylinder Rack #300 408
For Invision 456 models, Access 300 and 450, and XMT 456. Holds two large gas cylinders and has gun cable hangers and a consumable drawer in front for easy access. A convenient handle allows the cart to be pulled easily through doorways. System components including power source, single- or dual feeders, and Coolmate™ V3 can be mounted to the cart and secured.



PipePro System Cart #300 334
For PipePro Welding System. Same as #300 408 above, but is 4 inches taller to accommodate the optional Process Selector Control (#042 872).



Runner™ Cart #300 244
For Dynasty 350 and 700, and Maxstar 350 and 700 to be used with or without Coolmate 3.5. Cart features single cylinder rack, foot pedal holder, (3) cable/torch holders, (2) TIG electrode filler holders and a convenient drawer for tungsten and consumable storage.



2-Wheel Trolley Cart #300 480
For Dynasty 200 Series and Maxstar 200 Series, to be used with or without Coolmate 1. Easy-to-maneuver two-wheel cart features single-cylinder rack, chain for cylinder, straps (quick and easy to detach and carry machine), cable holders, torch holder, storage area, and filler rod storage area.

Call 1-800-4-A-MILLER for more information.

Cylinder Racks and Running Gear



Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack #300 337

For *Millermatic DVI₂, 212 Auto-Set, and 252*. Allows

operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Elevated Gun and Cable Rack #300 335

For *Millermatic DVI₂, 212 Auto-Set, and 252*. For use with single cylinder rack. (Included with *Dual EZ-Change Low Cylinder Rack*.)



Dual Cylinder Rack #195 299

For *Millermatic 350/350P*. Replaces single cylinder rack.



No. 19 Running Gear #041 580
For *Dialarc 250 AC/DC*. Four 8 in (203 mm) poly/rubber-blend wheels with 30 in (762 mm) towing handle.

No. 20 Running Gear #041 581
For *SRH-444*. Includes four 8 in (203 mm) poly/rubber-blend wheels and a 30 in (762 mm) towing handle.



No. 37 Running Gear #195 282
For *Syncrowave 250 DX and 350 LX*. Includes two 10 in (254 mm) wheels, two 5 in (127 mm) casters, two-compartment rack (for gas cylinder(s) or Coolmate V3 coolant system), and handles. Provides excellent mobility and easy to install.



No. 38 Hand Running Gear #195 352

For *Blue Stars*. Compact and balanced, lightweight wheelbarrow-style running gear designed for easy onsite mobility.



No. 39 Running Gear #300 009

For *Syncrowave 200*. Includes low cylinder rack, two 8 in (203 mm) wheels and two 4 in (102 mm) casters. Has two-compartment, integrated filler material storage and will accommodate one gas cylinder up to 60 in (152 cm) high and 9 in (23 cm) in diameter.



Running Gear/Cylinder Rack #770 187

For *Diversion 165, and Millermatic 140 Auto-Set and 180 Auto-Set*. Heavy-duty construction. For gas cylinders no larger than 7 in (178 mm) diameter, maximum weight 100 lb (45 kg).



Small Running Gear/Cylinder Rack #300 425

For *Millermatic 140 Auto-Set and 180 Auto-Set*. Durable construction. For gas cylinders no larger than 7 in (178 mm) diameter, maximum weight 75 lb (34 kg).



Shopmate 300 Running Gear/ Dual Cylinder Rack #300 145

For *Shopmate 300/300 DX*. The large 10 in (254 mm) rear wheels and 5 in (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source. Very easy to install. Handles double as a cable holder. Holds two cylinders.



Shown with optional cylinder rack (#042 887).

Standard Running Gear #042 886

For *Gold Stars, CP-302, Deltawelds, and Dimensions*. The 10 in (254 mm) rear wheels and 5 in (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source. Very easy to install. Handles double as a cable holder.

Standard Cylinder Rack #042 887
Installs on Standard Running Gear (#042 886) only.



Thunderbolt XL Running Gear #043 927

Mounts easily to unit and provides convenient portability. Includes two wheels, two feet and a handle.



Wildcat 200 Running Gear #300 532

For *Wildcat 200*. Running gear designed for excellent portability on the jobsite.



All-Purpose Running Gear #300 396 With inner tubes
#300 477 With Never Flat™ tires
For *Miller Legend 302, Bobcats and Trailblazers (Gas/LP)*. Includes two heavy-duty 15 in tires, two 8 in swivel casters and a heavy-duty handle. Recommended for all surfaces and applications and is easy to move around the jobsite.



All-Purpose Running Gear with Protective Cage #300 428 With inner tubes
#300 478 With Never Flat™ tires
For *Miller Legend 302, Bobcats and Trailblazers (Gas/LP)*. Running gear and rugged cage with cable holders protects your investment and is easy to move around flat surfaces.

All-Terrain Running Gear LX #300 457 With inner tubes
#300 492 With Never Flat™ tires
For *Miller Legend 302, Bobcats and Trailblazers (Gas)*. Includes two heavy-duty 15 in tires, two 10 in pneumatic tires with innertubes and a rugged handle to provide maximum maneuverability.

Note: Not for use with Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.

All-Terrain LX Running Gear with Protective Cage #300 458 With inner tubes
#300 493 With Never Flat™ tires
For *Miller Legend 302, Bobcats and Trailblazers (Gas)*. Running gear and rugged cage with cable holders protects your investment and is easy to move around the jobsite.

Note: Not for use with Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.

Coolant Systems

See Literature No. AY/7.2 **1 Phase**



Sold in multiples of four in 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37°F (-38°C) or boiling to 227°F (108°C).

Low-Conductivity Coolant (Clear, Pre-Mixed) #043 810

For TIG and MIG applications. NOT for use in push-pull systems or systems where aluminum is in coolant path/circuit.

Aluminum-Protecting Coolant (Green, Pre-Mixed) #043 809

Primarily used in push-pull systems where aluminum is in coolant path/circuit and high frequency is NOT used.

NEW! **Coolmate™ 1**
#300 360 115 VAC
#300 459 230 VAC

For Dynasty 200 Series, Syncrowave 200, and Maxstar 200 Series. Light industrial, 1-gallon cooler designed for water-cooled torches on power sources rated up to 200 A*.

Coolmate™ 3
#043 007 115 VAC
#043 008 230 VAC

Economical, 3-gallon cooler designed for water-cooled torches rated up to 500 A*.

Coolmate™ V3 #043 009

Vertical, 3-gallon cooler designed for water-cooled torches rated up to 500 A*.



*May vary with torch design and cable length.

Miller coolant systems are backed by the best warranty in the industry — 1 full year.

NEW! **Coolmate™ 3.5** #300 245
For Dynasty 350 and 700, and Maxstar 350 and 700. Industrial, 3.5-gallon cooler designed for water-cooled torches rated up to 600 A*.

Coolmate™ 4 #042 288
The best performer in its class — industrial, 4-gallon cooler designed for water-cooled torches rated up to 600 A*.



Coolmate™ 3X #300 419
For Syncrowave 250 DX and 350 LX. Industrial, 3-gallon cooler designed for water-cooled torches rated up to 500 A*.

Model	Motor Input Voltage	Maximum Current Draw	Maximum Cooling Capacity	IEC Cooling Capacity	Tank Capacity	Dimensions	Net Shipping Weight
Coolmate 1	115 VAC, 60 Hz	2.1 A (60 Hz)	2850 W (9700 BTU/hr) 1.8 qt/min (1.7 L/min)	1210 W (4120 BTU/hr) 1.1 qt/min (1 L/min)	1 gal (3.8 L)	H: 8 in (203 mm) W: 7 1/2 in (191 mm) D: 23 3/4 in (603 mm)	29 lb (13 kg)
	230 VAC, 50/60 Hz	0.65 A (50 Hz), 0.55 A (60 Hz)					
Coolmate 3	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	3820 W (13,000 BTU/hr) 4.2 qt/min (4.0 L/min)	1420 W (4840 BTU/hr) 1.1 qt/min (1 L/min)	3 gal (11.4 L)	H: 13 1/4 in (337 mm) W: 12 1/4 in (311 mm) D: 23 1/4 in (584 mm)	43 lb (20 kg)
	230 VAC, 50/60 Hz	2.5 A (50 Hz), 3.0 A (60 Hz)					
Coolmate V3	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	3820 W (13,000 BTU/hr) 4.2 qt/min (4.0 L/min)	1420 W (4840 BTU/hr) 1.1 qt/min (1 L/min)	3 gal (11.4 L)	H: 33 in (838 mm) W: 9 1/4 in (235 mm) D: 9 1/4 in (235 mm)	54 lb (24 kg)
Coolmate 3.5	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	4140 W (14,000 BTU/hr) 5.0 qt/min (4.7 L/min)	1660 W (5660 BTU/hr) 1.1 qt/min (1 L/min)	3.5 gal (13.2 L)	H: 11 3/4 in (298 mm) W: 15 3/4 in (400 mm) D: 26 in (660 mm)	70 lb (32 kg)
Coolmate 4	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	5500 W (18,000 BTU/hr) 5.9 qt/min (5.6 L/min)	1780 W (6070 BTU/hr) 1.1 qt/min (1 L/min)	4 gal (15 L)	H: 16 1/4 in (413 mm) W: 15 1/4 in (387 mm) D: 18 3/4 in (476 mm)	40 lb (18 kg)
Coolmate 3X	115 VAC, 50/60 Hz	5.9 A (50 Hz), 4.7 A (60 Hz)	4140 W (14,000 BTU/hr) 5.0 qt/min (4.7 L/min)	1660 W (5660 BTU/hr) 1.1 qt/min (1 L/min)	3 gal (11.4 L)	H: 17 in (432 mm) W: 27 in (686 mm) D: 39 in (991 mm)	158 lb (72 kg)

Engine Drive Accessories

See also Running Gear on page 75, Trailers on page 77, and Remote Controls and HF Arc Starters on pages 81 and 82.



Gas Cylinder Mounting Assembly
#195 330

For Miller Legend 302, Bobcats and Trailblazers (Gas/Diesel).

Designed for use with the All-Purpose Running Gears (see note below), Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain.

Note: Not recommended for diesel models when equipped with All-Purpose Running Gear. Cannot be used with LP Tank Mounting Assembly or All-Terrain Running Gears.



Gas Cylinder Mounting Kit
#300 237

For Renegade 180. Kit includes mounting brackets, retaining strap, regulator and gas hose.



LP Tank Mounting Assembly
#195 329

For Miller Legend 302, Bobcats and Trailblazers (LP).

Designed for use with the All-Purpose Running Gears, Protective Cage, or by itself. Includes bracket and clamp to mount 33 and 43 lb tanks horizontally, and hose with fittings to converter.

Note: Cannot be used with Gas Cylinder Mounting Assembly or All-Terrain Running Gears.



Cable Holder #043 946

For Big 40, Big Blue 400 and 500, Big Blue Air Pak, and Big Blue Turbo.



Lifting Eye #195 353

For Renegade 180 and Blue Stars.

Engine Drive Kits



Female Receptacle

Adapter Cord, Full KVA
#300 158 Field

For Miller Legend 302, Bobcats, Trailblazers, PRO 300, and PipePro 304. NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to common Millermatic and Spectrum 240 V plug.



1-Phase Full KVA Plug Kit
#119 172

For Miller Legend 302, Bobcats, Trailblazers, PRO 300, and PipePro 304. Used to run plasma systems on engine drive generator power.

3-Phase Full KVA Plug Kit
#165 963 For Bobcat 3 Phase.
#007 470 For PipePro 304.



Trailers

Note: Trailers are shipped unassembled.



HWY-1000 Trailer #195 013
For Miller Legend 302, Wildcat 200, Bobcats, and Trailblazers. A 1000 lb (454 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension.

The HWY-1000 comes with jack stand, 2 in (50 mm) ball hitch, fenders and lights.



Shown with fenders, lights and hitch (sold separately).

Mid-Frame Trailer #195 481
For PRO 300. A 1424 lb (645 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand and safety chain. Order fenders, lights and hitch separately.



4 West Four-Wheel Steerable Off-Road Trailer #042 801
For Big 40, Big Blue 400 and 500, Miller Du-Op, Big Blue Air Pak, and Big Blue Turbo. Heavy-duty 2570 lb (1166 kg) capacity trailer designed for use in mines, quarries, and other rough terrain. Has narrow 22 ft (6.7 m) turning radius. Includes 3 in lunette eye, universal hitch and safety chains.



HWY-224 highway trailer comes with jack stand, 2 in (50 mm) ball hitch, fenders and lights. OFR-224 off road trailer comes with jack stand and 2 in (50 mm) ball hitch.

HWY-224 Trailer #043 805 OFR-224 Trailer #043 802
For Miller Legend 302, Bobcats, Trailblazers, Big 40, Big Blue 400 and 500, PipePro 304, Miller Du-Op, Big Blue Turbo, and Big Blue Air Pak. A 2650 lb (1202 kg) capacity trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension.



Shown with hitch (sold separately).

HWY-430 Tandem Axle Trailer #043 806
For Big 40, Big Blue 400 and 500, Miller Du-Op, Big Blue Air Pak, and Big Blue Turbo. Smooth riding with 3750 lb (1701 kg) capacity. Includes: hand-operated parking brake, a self-actuating hydraulic brake system and a break-away device to lock brakes if the trailer comes loose. It also includes jack stand, fenders and lights. Order hitch separately.

*Width at outside of fenders. **Does not include tongue.

Model	Gross Axle Weight Rating	Gross Vehicle Weight Rating	Net Payload	Height of Bed	Road Clearance	Track (Center to Center of tires)	Standard Tires (Standard Rating or P-size Rating)	Dimensions	Net Weight
HWY-1000	1500 lb (680 kg)	1265 lb (574 kg)	1000 lb (454 kg)	18½ in (470 mm)	6½ in (165 mm)	50 in (1270 mm)	4.8-12	L: 98 in (2489 mm) W: 57½ in (1461 mm)*	265 lb (120 kg)
Mid-Frame	1500 lb (680 kg)	1666 lb (755 kg)	1424 lb (645 kg)	18½ in (470 mm)	6½ in (165 mm)	45 in (1143 mm)	B78-13	L: 98 in (2489 mm) W: 52 in (1321 mm)*	242 lb (110 kg)
4 West	2000 lb/axle (907 kg/axle)	3000 lb (1361 kg)	2570 lb (1166 kg)	21¼ in (540 mm)	8 in (203 mm)	55¼ in (1403 mm)	B78-13	L: 91 in (2311 mm)** W: 61¼ in (1556 mm)	430 lb (195 kg)
HWY-224 OFR-224	3500 lb (1588 kg)	2960 lb (1343 kg)	2650 lb (1202 kg)	18½ in (470 mm)	7½ in (191 mm)	52 in (1321 mm)	B-78-13C	L: 105 in (2667 mm) W: HWY-61 in (1549 mm)* OFR-58½ in (1486 mm)	320 lb (145 kg)
HWY-430	2200 lb/axle (998 kg/axle)	4280 lb (1941 kg)	3750 lb (1701 kg)	19¼ in (489 mm)	8½ in (216 mm)	52 in (1321 mm)	B78-13B	L: 156½ in (3975 mm) W: 61 in (1549 mm)*	530 lb (240 kg)

Engine Drive Kits (cont.)



Remote Oil Drain & Filter Kits Rear Mounted (shown)

#300 106 Field For Kohler
#300 417 Field For Subaru
Oil can be drained from the rear of the machine.

Front/Chassis Truck Mounted

#300 236 Field For Kohler
#300 418 Field For Subaru
Oil can be drained from the front of the machine or below the truck, mounted on the chassis.

For Miller Legend 302, Bobcats and Trailblazers (Gas). Makes servicing easy when mounted in tight spots.



Vandalism Lockout Kit

#195 118 Field
For Big 40, Big Blue 400 and 500, Big Blue Air Pak, and Big Blue Turbo. Lockable hinged steel panels cover

and protect name plate gauges and ignition switch (padlock included). Also includes engine compartment door lock and key.

Protective Covers

See also MIG Accessories on page 78, Plasma Cutter Accessories on page 80 and TIG Accessories on page 81.



#195 333 cover shown.

Heavy-duty, water- and mildew-resistant covers protect and maintain the finish of welders.

Protective Covers

#195 193 For Renegade 180 and Blue Stars.

#300 496 For Wildcat 200.

#195 333 For Miller Legend 302, Bobcats, and Trailblazer 302 and 275 DC (Gas) **without** Protective Cage or Running Gear.

#195 529 For Miller Legend 302, Bobcats, and Trailblazer 302 and 275 DC (Gas) **with** Running Gear.

#195 334 For Bobcat 250 Diesel and Trailblazer 302 Diesel **without** Protective Cage or Running Gear.

#300 379 For Trailblazer 302 Air Pak.

#195 301 For PRO 300.

#195 125 For PipePro 304.

Canvas Covers

#194 683 For Big 40, and Big Blue 400 and 500.

#195 159 For Big Blue Air Pak and Big Blue Turbo.

Extension Cords

PSA-2 Extension Cord #047 813
25 ft (7.6 m) cord used to extend the 10 ft (3 m) cord supplied with the PSA-2 control (4-pin to 4-pin connection).

Remote Control Extension Cords
#122 973 25 ft (7.6 m)
#122 974 50 ft (15 m)
#122 975 75 ft (23 m)
For 14-pin remote controls/24 VAC wire feeders. 14-pin plug to a 14-pin socket. (Not for 115 V XR or 50 Series feeders.)

Remote Control Extension Kits
#043 725 25 ft (7.6 m)
#043 726 50 ft (15 m)
#043 727 75 ft (23 m)
Fully-loaded 14-pin extension cords for remote controls or 24 V and 115 V feeders.

Spoolmate 3035 Extension Kit
#194 996 25 ft (7.6 m)
Extends hose and cables between Spoolmate gun and power source.

Spoolmatic 15A/30A Extension Hose and Cable Kits
#132 228 25 ft (7.6 m)
#132 229 50 ft (15 m)
Extends leads, etc. between Spoolmatic gun and power source.



International-Style Connectors

For *Dynastys, Syncrowaves, Maxstars, Invision 350 MPa, and XMT 304 and 350*. These power sources are equipped with International-style connectors for secondary connections. (Power source is shipped with two 50 mm male International-style plugs for use with #4 to #1/0 AWG size cable.)

International-Style Connector Kit

Kits include one International-style male plug which attaches to the work and/or weld cables and plugs into the International-style receptacles on the power source.

#042 418 50 mm

Accepts #4 to #1/0 AWG cable size. Required if male plugs shipped with power source must be replaced, or if additional plugs are needed.

#042 533 70 mm

Accepts #1/0 or #2/0 AWG cable size. Required if #1/0 or #2/0 AWG size cable is to be used.

Extension Kit For International-Style Cable Connectors

Used to adapt or extend weld and/or work cables. Kit includes one male International-style plug and one in-line female International-style receptacle.

#042 419 50 mm

Accepts #4 to #1/0 AWG size cable.

#042 534 70 mm

Accepts #1/0 or #2/0 AWG size cable.

International/Tweco® Adapter #042 465

A one-piece adapter which has an International-style male plug (to power source) on one end and a female Tweco receptacle (for weld cable connection) on other end.

International/Cam-Lok Adapter #042 466

A one-piece adapter which has an International-style male plug (to power source) on one end and a Cam-Lok receptacle (for weld cable connection) on other end.

Tweco®/International Adapter #195 116

One-piece adapter which has a Tweco-style male plug (to power source) on one end and a female Dinse- or International-style receptacle (for weld cable connection) on other end.

Tweco®-Style Connector 50 mm #195 115

Accepts #1/0 or #2/0 AWG cable size. Kit includes one Tweco-style male plug which attaches to the work and/or weld cables and plugs into the receptacle on the power source.



Thread Lock Connectors #225 029

For *Dynasty 700 and Maxstar 700*. Contains two male connectors that accept #1/0 to #4/0 AWG size cable.

Air-Cooled TIG (GTAW) Torch Adapters #195 234

For *Maxstar 150*. 25 mm (small) International-style flow thru for (WP17, WP9, WP50) one-piece torch.



#194 722

For *Syncrowave 200*. 50 mm International-style flow thru for (WP17, WP9, WP50, WP23) one-piece torch.



#195 379 (WP26)
#195 378 (WP17, WP9, WP50, WP23)

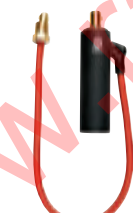
For *CST 280, Dynasty 200 and 350, Syncrowave 250 and 350, and Maxstar 200 and 350*. 50 mm International-style for one-piece torch.

Water-Cooled TIG (GTAW) Torch Adapters



#195 380

For *Syncrowave 200*. 50 mm International-style flow thru with gas and water return lines for (WP125, WP24W, WP25, and WP20) water-cooled torch.



#195 377

For *Dynasty 200 and 350, Syncrowave 250 and 350, and Maxstar 200 and 350*. 50 mm International-style with water return

line for (WP125, WP24W, WP25, WP20, WP18, WP12, CS310, CS410, WP22, WP27) water-cooled torch.



#225 028

For *Dynasty 700 and Maxstar 700*. 50 mm thread lock-style for (WP125, WP24W, WP25, WP20, WP18, WP12, CS310, CS410, WP22, WP27) water-cooled torch.

Load Banks



LBP-350 #043 329

Designed to provide an adjustable load for troubleshooting or calibrating welding power sources or generators. Standard equipment includes analog meters for both AC and DC output with jacks for external metering connections. It comes with a 13 ft (4 m) 115 V power cord and has seven 50 amp load switches, providing a maximum capacity of 350 amps.



Welding Power Load Bank #902 804

Designed to load test the output of transformer-type, engine- or motor-driven generator welding power sources. This unit can be used to test AC or DC welder outputs, and to demonstrate welding equipment to prospective customers.

Meters



Digi-Meter #041 656

Used to monitor welding voltage and amperage of constant voltage and constant current arc welding power sources, and engine-driven welding generators. This unit is not designed to measure primary voltage and amperage.

Digital Meters

#043 812 Field For *Gold Star* models AFTER serial #KG283595. Easy-to-install, front-panel-mount, digital amp and volt meters.

Meter Kits

#300 331 Field For *SuitCase X-TREME 8VS*.
#195 165 Field For *SuitCase 8RC* models BEFORE serial #LJ020185V.
#300 178 Field For *SuitCase 12RC*.

Weld Ammeter and Voltmeter Kit

#195 131 Field For *Big 40, Big Blue 400 and 500, and Big Blue Air Pak*. Panel-mounted analog meters monitor welding output.

MIG Accessories

Accessory Kits



Industrial MIG 4/0 Kit #300 390

Consists of Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.



Industrial MIG 4/0 Kit with Dinse Connector #300 405

Consists of Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with Dinse connector on one end and a lug on the other, and 15 ft (4.6 m) work cable with Dinse connector on one end and 600-amp C-clamp.



Shopmate 300 MIG Kit #300 150

Includes 15 ft (4.6 m) 1/0 work cable with clamp, 10 ft (3 m) 1/0 inter-connecting cable, Smith® Ar/CO₂ regulator with flowtube, 10 ft (3 m) gas hose and consumable storage box.



Shopmate 300 Spool Gun Kit #300 151

Includes 15 ft (4.6 m) 1/0 work cable with clamp, Smith® Ar/CO₂ regulator with flowtube and consumable storage box.

Protective Covers



#195 149 For *Millermatic 140 Auto-Set, 180 Auto-Set, and 211 Auto-Set with MVP*.



#195 142 For *Millermatic DVL₂, 212 Auto-Set, 252 and 350/350P*.

Features side pocket and helmet bag.

Pulsing Control



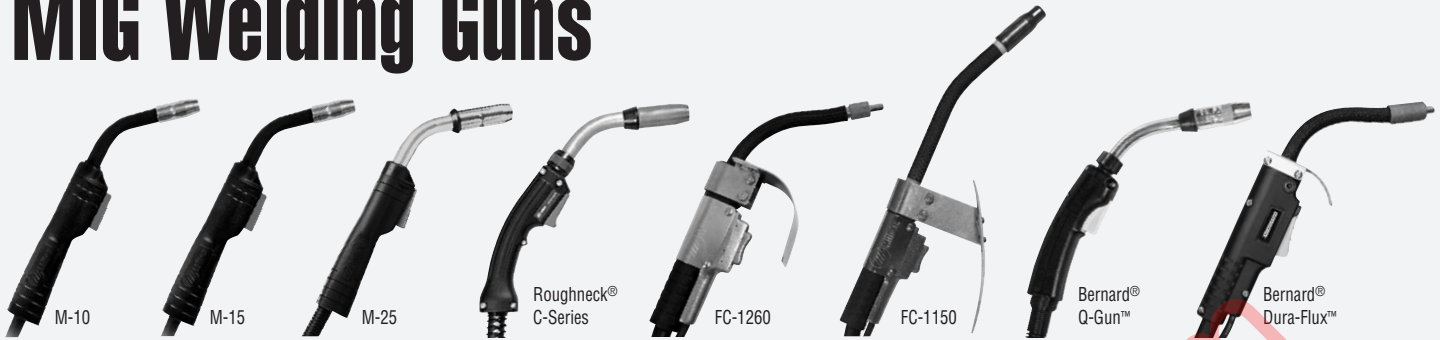
Optima™ MIG Pulse Control #043 389

For *Invisions, XMTs (except MPa and VS models), and PipePro 304*.

A multipurpose, micro-processor-based pulse control for synergic MIG (wire welding or GMAW), manual MIG pulsing or standard MIG welding. Use this control with all above power sources and any Miller wire feeder, including automatic feeders and spool guns. Includes 25 ft (7.6 m) cord with 14-pin plug.



MIG Welding Guns



*Rated duty cycle for MIGmatic and Roughneck guns using CO₂ gas. Please see individual Specification Sheets for detailed specifications.

Model	Part Number	Cable Length	Process	Rated Output	Rated Duty Cycle*	Standard Wire Size	Max. Recommended Wire Size
MIGmatic™ M-Series guns are an ideal match for Miller integrated MIG packages and other Miller wire feeders. Ask for Literature No. AY/15.0							
M-10	#195 605	10 ft (3 m)	MIG, Flux Cored	100 Amps	100%	.030-.035 in (0.8-0.9 mm)	.045 in (1.2 mm)
M-15	#169 589	10 ft (3 m)	MIG, Flux Cored	150 Amps	100%	.030-.035 in (0.8-0.9 mm)	.045 in (1.2 mm)
	#169 591	12 ft (3.7 m)					
M-25	#169 593	15 ft (4.6 m)	MIG, Flux Cored	250 Amps	100%	.030-.035 in (0.8-0.9 mm)	3/64 in (1.2 mm)
	#169 594	10 ft (3 m)					
	#169 596	12 ft (3.7 m)					
	#169 598	15 ft (4.6 m)					
M-25	#169 599	15 ft (4.6 m)	MIG, Flux Cored	250 Amps	100%	.035-.045 in (0.9-1.2 mm)	3/64 in (1.2 mm)
	#194 751	10 ft (3 m)					
	#194 752	12 ft (3.7 m)					
Roughneck® C-Series guns are fully compatible with all current Miller wire feeders and are also adaptable to other major brands of welding equipment. Ask for Literature No. AY/17.0							
C-3010	#194 751	10 ft (3 m)	MIG, Flux Cored	300 Amps	100%	.035-.045 in (0.9-1.2 mm)	5/64 in (2.0 mm)
C-3012	#194 752	12 ft (3.7 m)					
C-3015	#194 753	15 ft (4.6 m)					
C-4010	#194 754	10 ft (3 m)	MIG, Flux Cored	400 Amps	100%	.035-.045 in (0.9-1.2 mm)	5/64 in (2.0 mm)
C-4012	#194 755	12 ft (3.7 m)					
C-4015	#194 756	15 ft (4.6 m)					
C-5010	#194 757	10 ft (3 m)	MIG, Flux Cored	500 Amps	100%	.052-1/16 in (1.3-1.6 mm)	1/8 in (3.2 mm)
C-5012	#194 758	12 ft (3.7 m)					
C-5015	#194 759	15 ft (4.6 m)					
Ironmate™ Series guns are ideal for feeding self-shielded (gasless) flux cored wires with portable as well as standard-type wire feeders. Ask for Literature AY/16.0							
FC-1260	#195 732	10 ft (3 m)	Self-Shielded Flux Cored	350 Amps	60%	1/16-3/32 in (1.6-2.4 mm)	3/32 in (2.4 mm)
	#195 729	15 ft (4.6 m)					
FC-1260LM (For Lincoln and Miller Wire Feeders)	#194 912	10 ft (3 m)	Self-Shielded Flux Cored	450 Amps	60%	3/32-1/8 in (2.4-3.2 mm)	1/8 in (3.2 mm)
	#194 911	15 ft (4.6 m)					
FC-1150	#194 864	10 ft (3 m)	Self-Shielded Flux Cored	450 Amps	60%	3/32-1/8 in (2.4-3.2 mm)	1/8 in (3.2 mm)
	#194 863	15 ft (4.6 m)					

Bernard® Q-Guns™ and Dura-Flux™ guns — see Web site at bernardwelds.com

Tregaskiss™ Tough Gun™ Semi-Automatic MIG Torches — see Web site at tregaskiss.com/semiauto

MIG Gun Accessories

MIGmatic M-Series

Consumable Kits

For M-10 and M-15.

- #234 607 .023 wire
- #234 608 .030 wire
- #234 609 .035 wire

For M-25.

- #234 610 .030 wire
- #234 611 .035 wire
- #234 612 .045 wire

Contains contact tips, tip adapters, nozzle adapters and a standard nozzle.

Roughneck C-Series

Consumable Kit #206 073

Contains contact tips, diffuser, nozzle, nozzle insulator and gun hook.

Locking Trigger Switch #199 661

Allows Roughneck trigger to be locked during long welds.

Gun Hook #199 662

Enables Roughneck gun to be stored between welds.

Machine Adapter Kits

#199 663 For older Hobart and Thermal products.

#199 664 For Lincoln products.

Adapts Roughneck guns to be used with listed products.

Aluminum Conversion Kit #202 895

Allows 10 ft Roughneck guns to feed 3/64-1/16 in aluminum wires.

Spoolmate 3035/3545

Gas Valve/Trigger Receptacle Kit #300 338

Required to connect Spoolmate 3035/3545 to Millermatic DV1z.

Spoolmatic 15/30A

Adapter Cable to Interface

Spoolmatic 15/30A #195 287

For Millermatic DV1z. Wire feed adjustment with this adapter only takes place at the power supply. The wire speed adjustment at the spool gun will not function.

Ironmate Series

.045 Conversion Kit #199 178

Allows FC-1260 and FC-1260LM guns to feed .045 in self-shielded wire.

Bernard

NEW! Aluminum Gun Kits

- #300 541 .035, 10 ft (3 m)
- #300 542 .047, 12 ft (3.7 m)
- #300 543 1/16, 12 ft (3.7 m)

For Access Systems and 70 Series.

These aluminum gun kits have components designed specifically for pushing aluminum wire. Includes U-grooved .035, .047 or 1/16 in drive rolls, plastic guides, specific aluminum consumables, and a 10 or 12 ft Bernard® Q-Gun™.

Plasma Cutter Accessories

Cable Covers



#239 642 20 ft
#231 867 25 ft
#231 868 50 ft
 For Spectrum
 625 X-TREME,
 875, 2050, 1000
 and 1251.

Cart



No. 30B Economy Cart with Cord Wrap #300 511

For Spectrum 125C, 375, 875, 2050, 1000 and 1251. This economical running gear includes a cord wrap and provides mobility with an angle for easy front panel access and extra storage space.

Cutting Guides



Plasma Circle-Cutting Guides #195 981

For ICE-12C, 27C, 27T, 40T, 55C, 60T, 80T, and 100T. Cut straight lines or circles up to 12 in diameter.



Plasma Standoff Roller Guide #194 883

Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.



Suction/Magnetic Pivot Base #195 979

Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30 in diameter.

Filters



In-Line Air Filter Kit #228 926

For Spectrum 375, 375 X-TREME, 625 X-TREME, 875, 2050, 1000 and 1251. Mounts to the back of units and includes male and female 1/4 in NPT quick disconnect fittings and hose for easy on/off connection. Replaceable filter element (#228 928) filters to .85 microns.

Motor Guard Air Filter #042 306

For Spectrum 375, 875, 2050, 1000 and 1251. This filter is equipped with a mounting bracket that allows installation on the top, side, or rear panel of most plasma cutters. Replaceable filter element (#042 312).



RTI Filter and Bracket #300 491

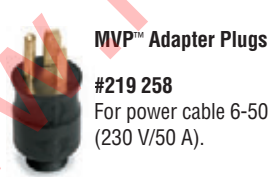
For Spectrum 375, 875, 2050, 1000 and 1251. Dryer will remove water, dirt and oil as small as one micron with 99.9% efficiency. Can be mounted on plasma cutter or on wall. Install as close as possible to point of air consumption. Replaceable filter element (#212 771).

Plugs and Cords



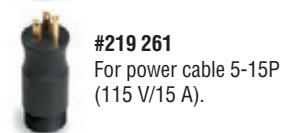
Adapter Cord, Full KVA #300 158 Field

NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to common Millermatic and Spectrum 240 V plug.

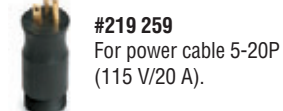


MVP™ Adapter Plugs

#219 258
 For power cable 6-50P (230 V/50 A).



#219 261
 For power cable 5-15P (115 V/15 A).



#219 259
 For power cable 5-20P (115 V/20 A).

For Spectrum 375 X-TREME, Maxstar 150 models, Millermatic 211 Auto-Set with MVP, Millermatic DVI₂, and Millermatic Passport Plus. Allows connection of machine to 115- or 230-volt receptacles without tools—just choose the plug that fits the receptacle.

Protective Covers



#195 144 cover shown.

#195 144 For Spectrum 125C and 375.
#300 388 For Spectrum 875.
#195 271 For Spectrum 2050.
#195 424 For Spectrum 1000 and 1251.



#300 184 X-CASE for Spectrum 375 X-TREME and 625 X-TREME and Maxstar 150 models.

Remote Pendant Controls

#180 605 For Spectrum 2050. For use with ICE-55CM machine-held torch.
#195 513 For Spectrum 1000 and 1251. For use with ICE-80TM and 100TM machine-held torches.

Torches



See your Miller distributor for complete information on the following ICE plasma torches and their consumables:

ICE-12C Hand-Held For Spectrum 125C.
ICE-27C Hand-Held For Spectrum 375.
ICE-27T Hand-Held For Spectrum 375 X-TREME.
ICE-40T Hand-Held For Spectrum 625 X-TREME.
ICE-55C Hand-Held and ICE-55CM Machine-Held For Spectrum 2050.
ICE-60T Hand-Held For Spectrum 875.
ICE-80T Hand-Held and ICE-80TM Machine-Held For Spectrum 1000.
ICE-100T Hand-Held and ICE-100TM Machine-Held For Spectrum 1251.



Plasma Torch Consumable Kits

#222 938 For ICE-12C.
#222 939 For ICE-27C and 27T.
#222 940 For ICE-40C and 40T.
#222 941 For ICE-55C.
#239 086 For ICE-60T.
#222 942 For ICE-80T.
#227 037 For ICE-100T.
#127 493 Empty consumable box.

CNC/Robotic Torch Kits

#195 432 25 ft ICE-80TM Kit.
#300 027 50 ft ICE-80TM Kit.
#226 057 25 ft ICE-100TM Kit.
#226 058 50 ft ICE-100TM Kit.
 Consists of a mechanized torch and cable assembly for CNC/Robotic interface, allowing remote start and "OK-to-Move" functions, as well as voltage sensing. Also includes remote pendant control with cable.

Polarity Switches/Controls

Polarity Control #042 871

This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

AC/DC Polarity Reversing Switch Kit #195 095 Field

For Big 40. Changes DC+/AC/DC-without using tools.

DC Polarity Reversing Switch Kit #043 942 Field

For Big 40, and Big Blue 400 and 500. Changes DC polarity without using tools.



Process Selector Control #042 872

For CC, CV or CC/CV welding power source. Provides easy way to change welding process. Also includes features of Polarity Control.

Call 1-800-4-A-MILLER for more information.

Remote Controls

See also Remote Control Extension Kits on page 77 and TIG Accessories Remote Controls on page 82.



PRHC-14 Hand Control #195 511

For all solid-state power sources after serial number JK674521.

Complete current or voltage control brings 120 volts GFCI power to work area in a single cord. Housed in a durable light aluminum case and includes 125 ft (38 m) cord with plugs.

Remote On/Off Control

#042 869 Field

For Gold Stars, Deltawelds, and Dimensions. Allows you to turn your power source on or off from a distance of 20 ft (6 m). This is especially useful if power source is up in a mezzanine.



RHC-3 Remote Hand Amperage Control

#040 056 20 ft (6 m) cord
#195 354 100 ft (30 m) cord
For Dialarc 250 AC/DC, SRH-444, and Mark VIII-2. Optional remote control facilities RF-10 (#041 111) required for the Dialarc 250 AC/DC. Includes cord and plug.



RHC-3GD34A Remote Hand Control #041 122

For Big 40 CC, and Big Blue 400 CC and 500 CC. Remote hand amperage control. Includes 20 ft (6 m) cord and plug.

Spot Welder Gyro Bail



Shown with MSW spot welder.

Gyro Bail #041 979

For MSW and LMSW air-cooled spot welders. Supports weight of welder. Operates with boom and counterweight or from spring-loaded cable. Spot welds in any position.

Stick Accessory Kits



No. 2 Stick Cable Set, 15 ft #195 196

Consists of 15 ft No. 2 electrode cable and holder, and 15 ft work cable and clamp. 200 A, 100% duty cycle.

No. 2 Stick Cable Set, 50 ft #195 195

Consists of 50 ft No. 2 electrode cable and holder, and 50 ft work cable and clamp. 200 A, 100% duty cycle.

2/0 Stick Cable Set, 50 ft #173 851

Consists of 50 ft 2/0 electrode cable and holder, and 50 ft work cable and clamp. 350 A, 100% duty cycle.

2/0 Stick Cable Set, 100/50 ft #043 952

Consists of 100 ft 2/0 electrode cable and holder, and 50 ft work cable and clamp. 300 A, 100% duty cycle.



Weld Cables

#195 457 Cable w/Electrode Holder

#195 458 Cable w/Work Clamp

Consists of a stud/Tweco® adapter and 10 ft 2/0 weld cable with a Tweco male connector and an electrode holder or work clamp. Rated up to 400 A.



2/0 Weld Cable Extensions

#195 456 50 ft

#195 455 100 ft

For use with weld cables #195 457 and #195 458.

TIG Accessories

High-Frequency Arc Starters and Stabilizers



HF-251D-1

#042 388

115 VAC

HF-251-2

#042 387

230 VAC

These portable 250 A, 60% duty cycle units add high-frequency to the welding circuit to help start arc when using the TIG process.

Secondary Contactor Kit

#041 969 Field For HF-251D-1.

#041 906 Field For HF-251-2.

For power sources without a contactor. Mounts inside HF-251 cabinet.

Kits



#195 054 kit shown.

Contractor Kits

#195 055 150 A TIG/Stick Package with RCCS-14 Fingertip

#195 054 150 A TIG/Stick Package with RFCS-14 HD Foot Pedal

For Dynasty 200 SD and DX, and Maxstar 200 SD and DX. Kit is an all-in-one welding package and comes complete with either a RCCS-14 fingertip control or RFCS-14 HD foot control plus protective carrying case, Weldcraft® 150 A TIG torch, International-style torch adapter, 200 A Stick electrode holder with 15 ft (4.6 m) cable, 300 A work clamp with 15 ft (4.6 m) cable, Smith® regulator/flowmeter with 12 ft (3.7 m) gas hose, gas hose coupler, and AK-2 torch accessory kit.



#907 136-01-5 kit shown.

Maxstar Travel Paks™

Ideal for the process piping market. Accessories include air-cooled TIG torch, electrode holder with work clamp, Smith® regulator/flowmeter with gas hose, consumables and Stick electrode storage box. Hand tools include inspection mirror, flashlight, side cutter, file, brushes, gloves and consumables box.

#907 135-01-3 with Maxstar 150 STL

#907 136-01-5 with Maxstar 150 STH

Includes case, RCCS-6M remote control, accessories, TIG gloves, and hand tools.

#907 135-01-4 with Maxstar 150 STL

#907 136-01-6 with Maxstar 150 STH

Includes case, RCCS-6M remote control and accessories.

#907 135-01-5 with Maxstar 150 STL

Includes case and accessories.

#300 249 Travel Pak case only



#300 183 kit shown.

Weldcraft® Water-Cooled Torch Kits

#300 185 250 A, WP20

#300 183 300 A, CS310

#300 186 400 A, WP18SC

For Dynasty and Maxstar 200/350/700, and Syncrowave 250 DX/350 LX.

Each torch kit includes a 25 ft (7.6 m) TIG torch, torch cable cover, work clamp with 15 ft (4.6 m) cable [12 ft (3.7 m) cable on 400 A kit], Smith® regulator/flowmeter with 12 ft (3.7 m) gas hose, torch adapter, and torch accessory kit. See Lit. No. AD.5.0 for complete individual package details.

Modules

Pulser Module #300 548

For Syncrowave 250 DX effective with serial #LE282983. For welding thin materials. Provides a heating and cooling effect of the weld puddle to reduce heat input and control distortion of the material. Provides 0.25 to 10 pulses per second.

Sequencer Module #300 547

For Syncrowave 250 DX and 350 LX effective with serial #LE282983. Provides a starting current higher or lower than the welding current. Provides final slope and final current for trailing the weld. Provides a spot timer for TIG spot application.

Protective Covers

#195 321 For Maxstar 200 Series.

#195 322 For Dynasty 200 Series.

#300 059 For Syncrowave 200.

#195 320 For Syncrowave 250 DX/350 LX.

#195 478 For XMT 304 and 350.

Remote Controls



RCC-14 (14-pin plug) #151 086
For all Miller solid-state power sources AFTER serial number JK674521. Side-to-side (east/west) rotary-motion fingertip current/contacter control fastens to TIG torch using two Velcro® straps. Great for production or contractors that need quick ramp-up. Includes 26.5 ft (8 m) cord and plug.



RCCS-14 (14-pin plug) #043 688 26.5 ft (8 m) cord
For all Miller solid-state power sources AFTER serial number JK674521.

RCCS-6M (6-pin plug) #195 184 13.25 ft (4 m) cord
#195 503 26.5 ft (8 m) cord
For Maxstar 150 STL and STH.

North/south rotary-motion fingertip current/contacter control fastens to TIG torch using two Velcro® straps. Great for applications that require a finer amperage control. Includes cord and plug.



RFC-23A #040 071
For Dialarc 250 AC/DC, Dialarc HF, Gold Star 330 A/BP and 320 A/BP. Foot pedal current/contacter control. Includes 20 ft (6 m) cords and plugs.



RFCS-14 (14-pin plug) #043 554 20 ft (6 m) cord
RFCS-5 (5-pin plug) #043 716 20 ft (6 m) cord
For all Miller solid-state power sources BEFORE serial #JK674521.

RFCS-6M (6-pin plug) #195 183 13.25 ft (4 m) cord
#195 504 20 ft (6 m) cord
For Maxstar 150 STL and STH.

Foot pedal current/contacter control. Includes cord and plug.



RFCS-14 HD (14-pin plug) #194 744
For all Miller solid-state power sources AFTER serial #JK674521. Heavy-duty foot pedal current/contacter control with increased stability and durability from larger base and heavier cord. Reconfigurable cord can exit front, back or either side of the pedal for flexibility. Includes 20 ft (6 m) cord and plug.

HD Conversion Kit #194 743
Kit provides the needed hardware to convert your existing RFCS-14 foot control to the heavy-duty version.



RHC-14 (14-pin plug) #129 340 20 ft (6 m) cord
#300 350 100 ft (30.5 m) cord
For all Miller solid-state power sources AFTER serial #JK674521. Miniature hand current/contacter control. Dimensions: 4 x 4 x 3-1/4 in (102 x 102 x 82 mm). Includes cord and plug.



RMLS-14 (14-pin plug) #129 337
For all Miller solid-state power sources AFTER serial #JK674521. Momentary- and maintained-contact rocker switch for contacter control. Push forward for maintained contact and backward for momentary contact. Includes 26.5 ft (8 m) cord and plug.



RMS-14 (14-pin plug) #187 208
For all Miller solid-state power sources AFTER serial #JK674521.

RMS-6M (6-pin plug) #195 269
For Maxstar 150 STL and STH. Momentary-contact switch for contacter control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5 ft (8 m) cord and plug.

Wire Feeder Accessories Power Supply Adapters

Millermatic PSA Control #195 019
Required when using 24 VAC wire feeder or XR-Control and gun with Millermatic 252.



PSA-2 Control #141 604
Required when using SuitCase 8RC and 12RC, 22A and 24A,

and 70 Series wire feeders with power sources having only 115 VAC available. Control can be mounted on wire feeder or positioned at power source and is equipped with a 14-pin receptacle for direct connection of wire feeder control cord. A short cord with a 4-pin plug is hard wired to the control. A 10 ft (3 m) interconnecting cord with a 4-pin for connection to PSA-2 and Hubbell connectors for older-style Miller CV power sources is included. Control can also be used with competitive power sources requiring a contact closure for contactor control. See extension cords for **PSA-2 25 ft Extension Cord** (#047 813) description.

Secondary Contactor

External Secondary Contactor #108 921
For S-32S and S-32SL feeders. The 115 VAC/12 VDC secondary contactor, rated at 250 amps, 60% duty cycle, is designed for use with welding power sources not having an output contactor. It allows welding wire to be electrically cold until operator is ready to weld. The contactor can be used with DC power sources operating with electrode positive or negative. Contactor will operate off 115 VAC or can be connected to 12 VDC battery of an engine driven welder without 115 VAC auxiliary power available. Gun trigger switch controls contactor and must remain closed while welding. Note: 25 ft (#108 925) Remote Contactor Cord required.

Spool Adapter

#047 141
For use with 14 lb (6.4 kg) spool of Hobart or Lincoln self-shielding wire.

Spool Gun Controls

For more information, see Lit. No. M/1.5.



SGA 100 #043 856
Required to connect Spoolmate 3035 spool

gun to Millermatic 180 Auto-Set. Allows connection to virtually any similar MIG welder — Miller or other brands. Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.



SGA 100C #043 857
SGA with contactor required to connect Spoolmate 3035/3545

spool guns to CV engine drives like Miller's Bobcat. Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.



WC-24 Weld Control #137 549
Packaged in a compact, lightweight, non-metallic enclosure, the WC-24 easily mounts on the power source. Designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles, the control includes a board-mounted potentiometer which can alter the drive motor acceleration rate to optimize arc starting performance.



WC-115A Weld Control #137 546
Without contactor
#137 546-01-1
With contactor

Operates on 115 VAC, and designed primarily for CC DC power sources. Can also be used with CV power sources or DC engine drives supplying 115 VAC. Used with a CC source, the control circuit functions in a voltage-sensing mode and with a CV source, it functions as a constant-speed circuit. Includes wire run-in and drive motor acceleration controls which ensure optimum arc starting performance.

WC-115 Contactor Kit

#137 548 Field
Recommended for Spoolmatic gun and WC-115A control when using power sources without weld output contactor. (This is installed in the WC-115A.)

Turntable Assembly

#146 236
Allows feeder to rotate as operator changes work position. Reduces strain and bending of gun cable.

Wire Straightener



For 70 Series, and 20 Series.

#141 580
For .035-.045 in (0.9-1.1 mm) wire.

#141 581
For 1/16-1/8 in (1.6-3.2 mm) wire.



Team Effort

Miller Recommended Brands

- 83 Tempil
Jetline
Magnaflux
Hobart Institute
- 84 Bernard
- 86 Hobart Brothers
- 88 Smith Equipment
- 90 Tregaskiss
- 92 Weldcraft

Great welds — and great welding systems — result from a team effort. Whether it's just your pride, passion and back pocket full of Stick rods or an advanced automated MIG system, great things happen when premium-quality components come together. That's why Miller proudly recommends the brands below and on the following ten pages. You can count on them for great performance, service excellence, innovation and outstanding reliability.



Contact Information

Web: tempil.com
Phone: 1-800-757-8301

Tempil incorporates state of the art temperature indicator technology to develop a wide range of temperature measurement products which include temperature indicators, temperature strips, temperature labels, temperature dots, and sterilization inks. These products are produced in a wide range of configurations to meet the needs of applications requiring accurate temperature measurement and temperature control.



Contact Information

Web: magnaflux.com
Phone: 1-847-657-5300

MAGNAFLUX is a leading worldwide supplier of magnetic particle, and dye penetrant inspection equipment and associated chemical products used for nondestructive testing.



Contact Information

Web: jetline.com
Phone: 1-949-951-1515

Jetline is your partner in welding automation, and is a leading supplier of automated welding systems and components. Jetline applies proven experience and innovative solutions to automated welding, and helps manufacturing companies around the world to improve product quality and increase productivity.



HOBART INSTITUTE
OF WELDING TECHNOLOGY

Contact Information

Web: welding.org
Phone: 1-800-332-9448
or 937-332-5000

Provides skill and technical training to career-oriented students and industry alike. The Institute is also the place to turn for books, DVDs, and other resources related to welding training.

The Bernard[®] Difference.

The Difference

Bernard[®] knows every welding application is different. That's why we engineer MIG products that put you in control. Our online configurator lets you customize a MIG gun for your specific application, and we ship most every one within 24 hours. You get the right gun, right away.

We are proud to provide our durable and innovative products for use with Miller wire feeders and machines and those of other major manufacturers. Each of our products is versatile, dependable and built with the goal in mind of improving your welding productivity and performance.

All Guns are Not Created Equal

We believe exceptional welding performance depends on an exceptional gun. Our Q-Gun[™] MIG guns help you achieve quality welds, increase productivity and lower costs. Customize your Q-Gun[™] at Bernardwelds.com.

Handle

- Multiple lightweight and comfortable options
- Ventilated to reduce heat and increase operator comfort

Liner

- 100 percent tested to ensure the smoothest wire feed in the industry
- Proprietary in-house coiling process improves wire feed performance

Trigger

- Numerous easy-to-change trigger options
- Designed and built to last more than 1 million cycles

A Flux-Cored Gun Built for the Way You Weld

Self-shielded flux-cored welding can be brutal on both you and your welding equipment. The last thing you want to deal with is a gun that only makes matters worse. The Dura-Flux[™], our first-ever self-shielded flux-cored gun, is designed to be extremely tough, yet comfortable to hold and use.

Handle

- Comfortable handle provides excellent control

Cable

- Heavy-duty steel monocoil cable withstands extreme abuse to provide a smooth, consistent wire feed

Trigger

- Non-metallic trigger absorbs less heat, reducing operator discomfort
- Sealed microswitch keeps out dust, dirt and other debris for longer work life

Contact Information

Address: 449 West Corning Road
PO Box 667
Beecher, IL 60401

Phone: 708-946-2281
Toll Free: 800-946-2281
Fax: 708-946-6726

Email: info@bernardwelds.com
Web: Bernardwelds.com



Sets the Standard

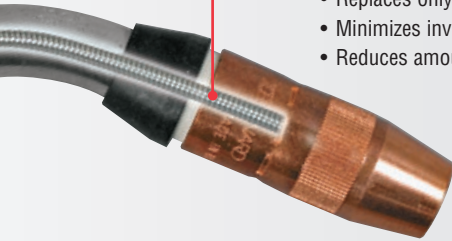
Bernard® developed its Centerfire™ consumables to save you time and money. Our contact tips, nozzles and diffusers are easy-to-use and high performing—they provide better arc starts, less spatter and more consistent welds. Centerfire consumables also last up to three times longer than competitive brands!

Don't use a Q-Gun™? No problem. You can still experience the immediate benefits of Centerfire™ technology. Our unique conversion parts allow you to convert most competitive guns to Centerfire™ consumables, quickly and easily. It's a switch that is sure to help you to lower inventory and costs!

- Minimize unnecessary time and costs for rework.
- Improve weld quality and increase productivity.
- Reduce downtime for consumable changeovers.

Jump Liner

- Replaces only the most commonly worn liner area
- Minimizes inventory and downtime for changeover
- Reduces amount of time a gun goes offline



Stay-Tite™ Technology

- Long-lasting power cable compression fittings and necks with large tapered gun connections combine to form the foundation of Bernard® Stay-Tite™ technology. This technology ensures optimal conductivity to increase weld consistency and lessen heat output while improving product durability.

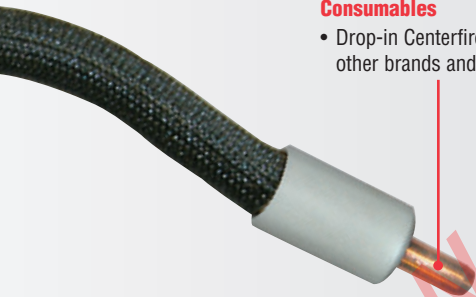


Neck

- Fixed, rotatable and multiple length options improve operator comfort
- Rotatable necks changeover without tools

Consumables

- Drop-in Centerfire® consumables last longer than other brands and change out quickly



Trigger Guard

- Standard small trigger guard improves maneuverability compared to larger heat shields
- Optional heat shield available



Power Pin

- Easily interchangeable direct plug connections available for Miller®, Lincoln®, Tweco® 4 and Euro® wire feeder connections

Optional Heavy Duty Centerfire nozzle features removable nozzle cone, thicker copper walls and ultra heat resistant insulator.

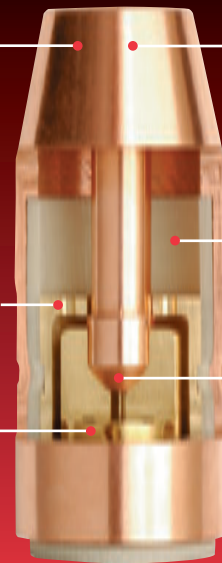
Built-in spatter shield protects diffuser, improves gas flow

Diffuser mates securely with contact tip for better conductivity

Threaded nozzle keeps contact tip centered for better weld placement and less spatter

Composite insulator extends life, withstands heat and abuse

Non-threaded contact tip with tapered base and large diameter seat for good heat dissipation





A Tradition of Filler Metal Excellence

Hobart Brothers Company is proud to be a leading provider of superior welding filler metals, technical education and customer service for the welding industry. Our goal is, and has always been, to find the right stick electrode and solid or tubular wire to improve your productivity and lower your costs.

To meet all of your welding needs, Hobart Brothers offers three brands of filler metals, each of which we guarantee for consistency, quality and performance. No matter how challenging the application, we are certain to have the right product for you.

Best of all, we promise to respond to your orders quickly to ensure you get the fastest possible delivery of your filler metals. That's because Hobart Brothers believes in helping you get real solutions and real benefits when you need them.

HOBART®

Our Hobart® brand features **stick electrodes, and solid, flux-cored and metal-cored wires** designed for mild and low alloy steel applications. All Hobart brand filler metals feature superior arc performance, and selections are available for fast-freezing or self-peeling slag, low hydrogen weld deposits, high deposition rates and efficiencies, and X-ray quality welds.

Hobart brand filler metals all meet stringent quality control standards to ensure unmatched performance, and superior chemical and mechanical properties.

Contact Information

Address: 101 Trade Square East
Troy, OH 45373

Phone: 937-332-4000
Toll Free: 800-424-1543
Fax: 937-332-5224

Email: hobart@hobartbrothers.com
Web: Hobartbrothers.com



TRI-MARK®

Our premier Tri-Mark® brand of **gas-shielded, self-shielded and low alloy flux-cored wires** is designed to provide superior welding performance. The same holds true for each of our **mild steel and low alloy metal-cored wires**.

Tri-Mark flux-cored wires offer benefits including fast-freezing, easily-removable slag and low hydrogen weld deposits. Our Tri-Mark metal-cored wires improve weld quality, reduce post-weld cleanup and minimize rework by providing low spatter levels, excellent wetting action and high deposition efficiencies.

McKAY®

McKay® brand **stainless steel and hard surfacing filler metals** excel on the most demanding applications.

Stainless steel stick electrodes, spools, tubular wires and cut-lengths provide excellent arc characteristics for quality welds and each is available in common 308, 309 and 316 types, and other alloys. McKay hard surfacing stick electrodes and flux-cored wires extend equipment life by providing build up or overlay weld deposits that meet or exceed the original manufacturer specifications for impact or abrasion resistance.

HOBART BROTHERS



Premium Products Built for a Lifetime

Six Reasons to Choose Smith

1. Smith's Lifetime Warranty

It's the longest and strongest in the business!

2. Products Engineered for Safety

Our torches feature exclusive technology to help keep you safe.

3. Superior Cutting Tip Performance

We offer long-lasting cutting tips for even the most challenging jobs.

4. Our Complete Product Line

Smith offers a complete line of oxy-fuel cutting, welding, brazing and heating equipment, plus gas regulators.

5. Value

Our exceptional product quality and warranties offer long-term cost savings!

6. Made in the USA

Our products have been made with care and quality in the USA since 1917!

Lifetime Warranty Torches

Smith torches are so durable and high performing they carry a Lifetime Warranty. And lifetime means lifetime! We repair or replace any torch for free — that's how confident we are in our product.

In fact, we are the only manufacturer worldwide this committed to our customers — and we'll get a torch in your hands within 24 hours. When your job depends on it, Smith will be there for you.

Use a Smith torch, and you'll see it IS different. Why would you buy anything but a torch with...

- The highest component quality standards on the market.
- A tradition of manufacturing excellence.
- Made in USA.
- 100-percent quality control testing.
- And, of course, our exclusive Lifetime Warranty!



Contact Information

Address: 2601 Lockheed Avenue
Watertown, SD 57201

Phone: 605-882-3200
Toll Free: 800-843-7912
Fax: 800-685-3370

Email: smith@smithequipment.com
Web: Smithequipment.com



Guaranteed Next Day Delivery!
1-800-843-7912

Gas Regulators

Achieving consistent welding and cutting performance is important in any application. So is finding a durable product that saves money. Smith has engineered its gas regulators with such key benefits in mind.

Our gas regulators feature high-quality components that resist corrosion, freezing and clogging to provide accurate gas flow and readings. Plus, our exclusive designs ensure steady outlet pressures to reduce gas waste and unnecessary cost.

So, what makes a great regulator?

- Exclusive internal designs that lower costs and warranty claims.
- Exacting manufacturing standards and superior workmanship.
- No CO₂ freeze guarantee on select models.
- Getting the right regulator, right away — in just 24 hours!



Specialty Gas Regulators

Complex applications require comprehensive product lines. Smith's full line of specialty gas regulators has been engineered for general purpose, analytical, high purity and corrosive gases, and feature durable, high-performing and problem-solving designs.

For precise pressure control on even the most critical applications, along with thousands of available configurations in stock, you are sure to find the right products for the job when you need them!

Find the Smith difference with...

- Premium components and features at a competitive price.
- Quick and reliable technical support to answer your questions.
- Exacting manufacturing standards and superior workmanship.



SMITH
 EQUIPMENT

NEVER COMPROMISE YOUR BOTTOM LINE

Tregaskiss is a leading supplier of premium MIG welding guns, peripheral products, and accessories around the world. Built-to-order with precision and durability in mind, Tregaskiss™ Products are the toughest available. Our guns and consumables consistently last longer, resulting in fewer consumable replacements, reduced downtime, less rework and a better bottom line.



Gun runs through robot arm.

2 year warranty on LSR Unicables — engineered to minimize stress of robotic wrist rotation.

The new **TOUGH GUN ThruArm™ Series** with patent-pending LSR Unicables has been designed to minimize downtime and improve welding performance on today's through-arm arm robotic welding systems. Models available for ABB, FANUC, Motoman and OTC through-arm robots.

ROBOTIC MIG GUNS AND PERIPHERALS

TOUGH GUN™ Robotic MIG Guns are engineered to offer the performance and precision required to take on the demands of a high-volume production welding environment. Air-cooled and water-cooled models are available and can be configured to match your welding application. Custom models are available upon request.

TOUGH GUN Robotic Peripherals complement the built-in precision and durability of our robotic MIG guns to create a fully integrated robotic welding system.



Next Generation **TOUGH GUN Reamer** — Over 10 New Powerful Features!

COMMON CONSUMABLE PLATFORM

QUICK LOAD™ Liner

Cut your liner replacement time by more than 50% (as compared to conventional liners) by loading your liners from the front!



Contact Information

Canada and U.S.A.

Phone: 1-877-737-3111

Fax: 1-877-737-2111

International

Phone: +1-519-737-3000

Fax: +1-519-737-2111

Email: info@tregaskiss.com

Web: Tregaskiss.com



LIFETIME WARRANTY
ON HANDLES AND SWITCHES
IF YOU BREAK IT,
WE'LL REPLACE IT FREE!

SEMI-AUTOMATIC MIG GUNS

TOUGH GUN Semi-Automatic MIG Guns are known as much for their rugged durability in high-volume production environments as their ergonomic design. Air-cooled and water-cooled models are available and can be configured to match your welding application.

Double Life MIG Gun System

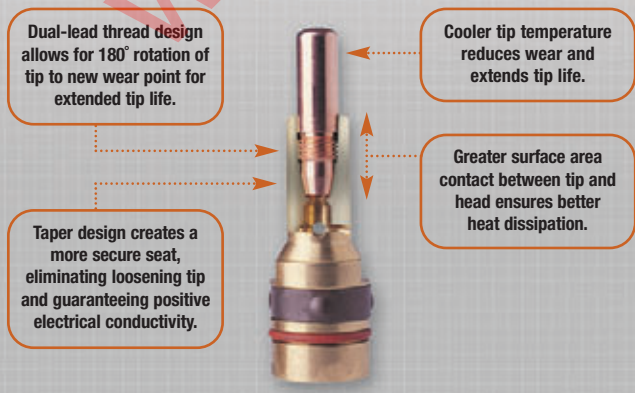
Double the life-span of your MIG gun by “flip-flopping” the ends when the front end gets worn.

- Front and back ends of TOUGH GUN MIG Guns have identical connections and handles
- Simply “flip flop” the switch and gooseneck at the front of the gun with the power pin at the back

TOUGH GUN Robotic and Semi-Automatic MIG Guns share the same consumables which means less inventory for you to manage. Experience the performance and reliability you need to maximize production and minimize downtime with genuine consumables from Tregaskiss.

TOUGH LOCK™ Contact Tip System

TOUGH GUN MIG Guns come standard with our patented TOUGH LOCK Contact Tip System.



QUICK LOAD Gooseneck

- Quickly replace or rotate goosenecks on the fly
- Available on curved handle gun models only



The TIG Welder's Choice

At Weldcraft, our top priority is manufacturing the best and most innovative TIG torches and accessories in the industry. No matter how demanding or critical the application, we're sure to have the right TIG product for you. That's what makes us the "TIG Welder's Choice."

We also provide prompt order processing and delivery, along with reliable customer and technical support. We know how important getting the right information and the right product is and Weldcraft is committed to delivering both.

Best of all, our superior product engineering and unique designs ensure long-lasting, trouble-free performance, greater productivity and lower costs — everything you need in a TIG torch or accessory!

Crafter™ Series

We designed our Crafter Series of air- and water-cooled TIG torches for the professional welder who demands excellence in TIG welding performance. Engineered with the finest materials and most advanced technology, Crafter Series torches are ideal for critical and specialty applications.

Find best-in-class advantages in our Crafter Series:



- **High-quality, long-lasting components** that help reduce replacement costs.
- **Ample cooling capacity** to improve productivity on demanding jobs.
- **Maneuverable, easy-to-handle designs** that increase operator comfort and arc-on time.

Contact Information

Address: 2741 North Roemer Road
Appleton, WI 54911

Phone: 920-882-6800

Toll Free: 800-752-7620

Fax: 920-882-8241

Email: customerservice@weldcraft.com

Web: Weldcraft.com





WP Series

From the most intricate applications to the most demanding, our WP Series is up for the challenge. Our line of core TIG torches meets your every welding need — regardless of the angle, amperage or material. We even have options for your tough robotic applications.

Expect the best with the WP Series, including:

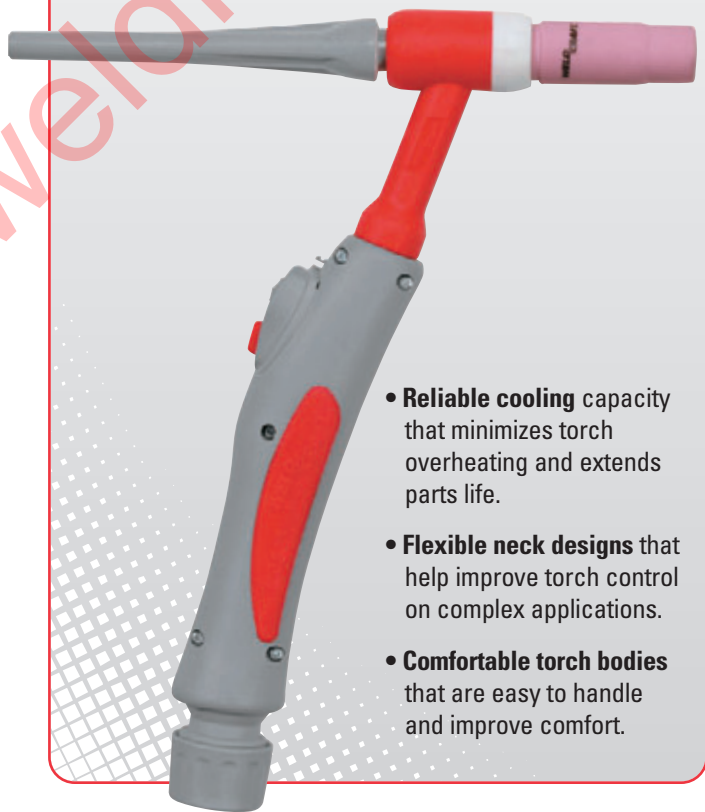


- **Innovative designs and configurations** for improved versatility.
- **Durable components** that withstand jobsite abuse and increase productivity.
- **A wide selection** of precision-machined accessories designed for trouble-free performance.

Legacy™ Series Torches

Our Legacy Series of torches and accessories offers excellent quality at competitive prices! The Legacy Series products are specifically designed for less demanding applications and feature reliable air- and water-cooled options.

Start your own Legacy with great features like:



- **Reliable cooling** capacity that minimizes torch overheating and extends parts life.
- **Flexible neck designs** that help improve torch control on complex applications.
- **Comfortable torch bodies** that are easy to handle and improve comfort.

WELD The TIG Welder's Choice
CRAFT®



This glossary of terms consists entirely of Miller Technology Exclusives (MTE).

 For a complete listing of welding terms, visit MillerWelds.com/Education/Dictionary.html

Accu-Pulse®—MIG process that delivers precise control of the arc even over tack welds and in tight corners. Provides optimum and precise molten puddle control.

Accu-Rated™ Power—The standard for measuring engine-driven generator power. Guarantees delivery of all power promised.

Accu-Set™—Patented amperage indicator on Thunderbolt® models provides accurate heat control with infinite amperage control.

Active Arc Stabilizer™—Enhances arc starts and provides a softer arc throughout all ranges, with less puddle turbulence and less spatter.

Adaptive Hot Start™—Automatically increases the output amperage at the start of a Stick weld, should the start require it. Helps eliminate sticking of the electrode at arc start.

Advance Active Field Control Technology™—A simple and reliable patented way of accurately controlling an engine drive's generator weld output.

Aluminum Pulse Hot Start™—Automatically provides more arc power to the Millermatic® 350P to eliminate a "cold start" that is inherent with aluminum starts.

Arc-Drive™—Automatically enhances Stick welding, especially on pipe, by focusing the arc and preventing the electrode from going out.

Auto-Crater™—Allows a TIG arc on Trailblazer® Series to crater-out, allowing time for addition of filler, without the loss of shielding gas. Eliminates the need for a remote control at arc end.

Auto-Gun Detect™—Automatically detects and recalls the voltage, wire feed speed, and timer on the active gun—either the MIG gun, spool gun, or push-pull gun on the Millermatic® 252, 350 and 350P.

Auto-Line™—Allows for any primary input voltage within a range, single- or three-phase, 50 or 60 Hz. Also adjusts for voltage spikes within the entire range.

Auto-Link®—Internal inverter power source circuit that automatically links the power source to the primary voltage

being applied (230 V or 460 V), without the need for manually linking primary voltage terminals.

Automatic Start at Idle™—Idles engine immediately when started, extending engine life and reducing fuel consumption and noise.

Auto-Retire™—Automatically controls the pilot arc when cutting expanded metal or multiple pieces of metal, without manual retriggering.

Auto Remote Sense™—Automatically switches machine from panel to remote control with remote connected. Available on Delta-Fab™ System, Dimension™ NT 450, XMT® 350, Trailblazer® Series, and PRO 300. Eliminates confusion and need for panel/remote switch.

Auto-Set™—Sets the MIG welder automatically to the proper parameters. Operator only needs to set the wire diameter and material thickness, and go! Available on Millermatic® 140 Auto-Set, 180 Auto-Set, 211 Auto-Set with MVP™, and 212 Auto-Set™.

Auto Speed™—On the Trailblazer® 302 Air Pak™, in the Auto Speed mode of the Speed Control Switch, the engine speed will be auto-selected depending upon total power needed.

Auto Stop™—Allows a TIG arc to be stopped without the loss of shielding gas on Trailblazer® Series.

Access® File Management—Software that turns a standard Palm™ handheld into a data card and a remote pendant for all Access systems. Allows e-mailing, storage, and transfer of welding programs.

Blue Lighting™—High frequency arc starter for non-contact arc initiation. Provides more consistent arc starts compared to traditional HF arc starters. Available on Maxstar 200 (SD, DX and LX models) and Dynasty 200 Series.

Dual Power Option™—Gives the option on the PipePro® 304 engine drive to use 230 volt single- or three-phase electric input power, eliminating engine wear, noise and emissions, as well as fuel costs.

Dual Voltage Input—See MVP™ (Multi-Voltage Plug).

Engine Save Start™—Idles engine 3–4 seconds after starting on Trailblazer® 275 DC and 302. Extends engine life and reduces fuel consumption.

Extended AC Balance™—(30–99%) controls the amount of oxide cleaning (amperage time in Electrode Negative) on Dynasty® 350 and 700. Essential for high quality aluminum welds.

EZ-Access™—Consumable compartment and parameter chart in flip-down compartment on front of Millermatic® DVIz™, 212 Auto-Set™, and 252. Set weld parameters right the first time with fast access to the set up chart.

EZ-Change™—Low cylinder rack allows operators to easily roll cylinders on and off of rack—no need to lift cylinders. Available on Millermatic® DVIz™, 212 Auto-Set™, and 252.

Fan-On-Demand™—Internal power source cooling system only works when needed, keeping internal components cleaner.

FasTip™ Contact Tip—Patented, single-turn for quick change—no tools needed!

Gun-On-Demand™—Allows you to use either a standard gun or a Spoolmatic® gun on the Millermatic® 212 Auto-Set™ without flipping a switch. The machine senses which gun you are using when you pull the trigger.

Hot Start™—Used on some Stick (SMAW) machines to make it easier to start difficult-to-start electrodes. Used for arc starting only.

Lift-Arc™—This feature allows TIG arc starting without high frequency. Starts the arc at any amperage without contaminating the weld with tungsten.

Low OCV Stick™—Reduces OCV on several Maxstar® and Dynasty® models when power source is not in use, eliminating need for add-on voltage reducers.

LVC™ (Line Voltage Compensation)—Keeps the output of a power source constant, regardless of minor fluctuations in input power.

MVP™ (Multi-Voltage Plug)—Allows connection of Spectrum® 375 X-TREME™, Maxstar® 150 models, and Millermatic® 211 Auto-Set™ with MVP, DVIz™, or Passport™ Plus to 115- or 230-volt receptacles without tools—just choose the plug that fits the receptacle.

Pro-Pulse™—On the PipeWorx™ Welding System, easier-to-use pulse welding method than conventional pulse for out-of-position pipe welding applications. Offers precise arc and puddle control even in narrow weld joints, providing optimum molten puddle control for out-of-position welding. Also produces excellent side-wall fusion on all pipe joint designs.

Regulated Metal Deposition (RMD™)—Precisely controlled short-circuit transfer technology, available on PipeWorx™ Welding System and as an option on Access®

models. For spatter reduction, up to 20% reduced heat input, or filling gaps. Reduces weld training and improves weld quality.

SharpArc®—Optimizes the size and shape of the arc cone, bead width and appearance, and puddle fluidity. Available on the Millermatic® 350/350P and XMT® 350 MPa.

Smart Fuel Tank—Tank's design minimizes chance of fuel backflow.

Smooth Start™—Provides a smooth, spatter free start to the MIG weld on Millermatic® 140 and 180 models.

SunVision™—Allows easy reading of digital meters in direct sunlight or shade on SuitCase® VS models and Trailblazer® Series.

SureStart®—Provides consistent Access® arc starts by precisely controlling power levels for specific wire and gas combinations.

Syncro Start™—Allows selectable customized arc starts on Syncrowave® 200, 250 DX and 350 LX.

Tip Saver Short Circuit Protection™—Shuts down output when the MIG contact tip is shorted to the work, on the Millermatic® 140 Auto-Set™ and 180 Auto-Set™. Extends contact tip life and protects machine. **Trigger Reset** permits quick reset at gun rather than at machine.

Torch Detection™—Syncrowave® 250 DX and 350 LX detect if TIG torch is water- or air-cooled.

Tri-Cor™ Technology—Stabilizer design on the Bobcat™ 250 that delivers smoother welds and decreased spatter with E7018 electrodes, without sacrificing performance with E6010 electrodes.

Ultra-Quick Connect™—Offers the fastest plasma torch and work cable connection and removal in the industry. Available on Spectrum® 875, 1000 and 1251.

WaveWriter™ File Management—Includes all Access® File Management functions, plus a simple, graphical wave-shaping program for the most demanding Pulsed MIG applications.

Weld at Idle™—Allows PipePro® 304 to automatically weld at a quieter, lower RPM, using less fuel. When more output is required, the machine goes to high speed without a change in the arc.

Wind Tunnel Technology™—Internal air flow on many Miller inverters, that protects electrical components and PC boards from contamination, significantly improving reliability.



Miller Product Literature Sheets



Use this catalog to help compare and select power sources. To obtain detailed product literature sheets visit our Web site at MillerWelds.com, see your Miller distributor or call 1-800-4-A-MILLER. These sheets provide ordering information, control features, options and recommended accessories. They also provide complete specifications, including cCSAus, CE, CCC, IEC, CSA, UL and NEMA listings.

In a hurry? Check our Web site, or upon request, our 800-number operators can also fax the literature directly to you. Simply ask for a literature sheet by product name.

MillerWelds.com and 1-800-4-A-MILLER (1-800-426-4553) are also your direct line to locating your nearest Miller distributor sales and service provider. Operators will even transfer your call directly to the distributor of your choice!

Operators are on-duty from 8:30 AM to 5:00 PM (eastern time). At all other times an automated service is available.



Miller has a long history of being the first to meet the changing needs of welders in a variety of industrial and non-industrial markets. In 1993 we even became the first U.S. welding equipment manufacturer to be registered to the world's highest quality standard — ISO.



And to further demonstrate Miller's commitment to its customers, we back all our equipment with the best coverage in the industry — the True Blue® Warranty. And that's The Power of Blue®.



Index

A Arc Armor Safety Apparel 73	G Glossary 94	P PipePro 304 67	S SuitCase 12RC 40
Auto-Access Systems 36	Gold Star Series 12	PipeWorx Welding System 52	SuitCase X-TREME 8VS 39
Automation Components 36	H Helmets 72	PRO 300 65	SuitCase X-TREME 12VS 39
Access Systems 34	I Invision 350 MPa 33	R R-115 44	Syncrowave 200 16
B Big 40 66	Invision 456MP 33	Renegade 180 57	Syncrowave 250 DX 17
Big Blue 400/500 66	Invision 456P 33	S 70 Series 46	Syncrowave 350 LX 17
Big Blue Air Pak 68	M Mark VI 54	70 Series Swingarcs 45	T 22A/24A 44
Big Blue Turbo 68	Mark VIII-2 54	S-32S/S-32SL 45	Thunderbolt XL 225 AC 12
Blue Star 145 58	Maxstar 150 S 13	Shopmate Series 48	Thunderbolt XL AC/DC 12
Blue Star 185 58	Maxstar 150 STL/STH 20	Spectrum 125C 7	Traillblazer 275 DC 62
Bobcat 225 60	Maxstar 200 STR 13	Spectrum 375 7	Traillblazer 302 62
Bobcat 250 61	Maxstar 200 Series 21	Spectrum 375 X-TREME 8	Traillblazer 302 Diesel 62
Bobcat 250 Diesel 61	Maxstar 350 22	Spectrum 625 X-TREME 8	Traillblazer 302 Air Pak 63
Bobcat 3 Phase 57	Maxstar 700 22	Spectrum 875 9	W Wildcat 200 58
C Coolant Systems 76	Miller Du-Op 67	Spectrum 1000 10	X XMT 304 CC/CV 50
CP-302 31	Miller Legend 302 57	Spectrum 1251 10	XMT 304 Rack 55
CST 280 14	Millermatic 140 Auto-Set 25	Spectrum 2050 9	XMT 350 CC/CV, MPa, VS 50
CST 280 Rack 55	Millermatic 180 Auto-Set 25	Spoolmate 100 Series 41	XMT 350 Rack 55
D Delta-Fab System 31	Millermatic 211 Auto-Set w/MVP 26	Spoolmate 3035 41	XMT 456 CC/CV 50
Deltaweld Series 32	Millermatic 212 Auto-Set 27	Spoolmate 15A/30A 42	XR-Aluma-Pro Gun 43
Dialarc 250 AC/DC 12	Millermatic 252 28	Spot Welders 69	XR-Control 43
Dimension NT 450 49	Millermatic 350/350P 29	SRH-444 12	XR-A/W Guns 42
Dimension Series 48	Millermatic DV1z 27	Sub Arc DC 650/1000 70	
Diversion 165 16	Millermatic Passport Plus 26	SuitCase 8RC 40	
Dynasty 200 Series 18			
Dynasty 350 19			
Dynasty 700 19			

New! or Improved!
products appear in blue type.

Contents 2009

- 6  Plasma Cutters
- 11  Stick (SMAW) Power Sources
- 15  TIG (GTAW) Power Sources
- 23  MIG (GMAW) Power Sources
- 36  Automated Manufacturing Systems
- 38  Wire Feeders
- 47  Multiprocess Power Sources
- 53  Multioperator Power Sources
- 56  Engine-Driven Welding Generators
- 69  Spot Welders
- 70  Submerged Arc
- 72  Welding Protection
- 74  Accessories
- 83  Miller Recommended Brands

Click On A Whole New World — MillerWelds.com



- Step-by-Step Welding Project Plans, along with hundreds of project photos displayed in the Project Idea Gallery.
- Three active Forums — Welding Discussions, Welding Projects and Motorsports — as well as an Industrial Welding Blog.
- Two clicks get you details for any product, and one more click gets you product spec sheets, parts and accessories recommendations, selection and comparison guides — even connect with a local distributor to check price and availability.
- The latest welding news, feature stories and exclusive offers in Miller's Power Click E-Newsletter.
- Articles, Videos and additional Training Tools for Improving Your Skills.
- Welding information organized by Industry & Interest to meet your professional and recreational welding needs.
- Register your equipment on-line. See MillerWelds.com/register to protect your investment in case it is lost or stolen.
- Easy-to-find Miller Sales, Service and Rental locations, downloadable product information, Owner's Manuals and much more!
- Miller Gear, Special Offers and Gift Certificates at the Company Store (MillerWeldsStore.com).

WE'D LIKE
your **OPINION**

You can help us determine the effectiveness of this catalog. Please go to MillerWelds.com/catalog to fill out our on-line survey. Thank you!

**Get Miller Gear Online —
MillerWeldsStore.com**

Buy Miller gear online.
Shirts, hats, mugs and more!



Distributed By:

